

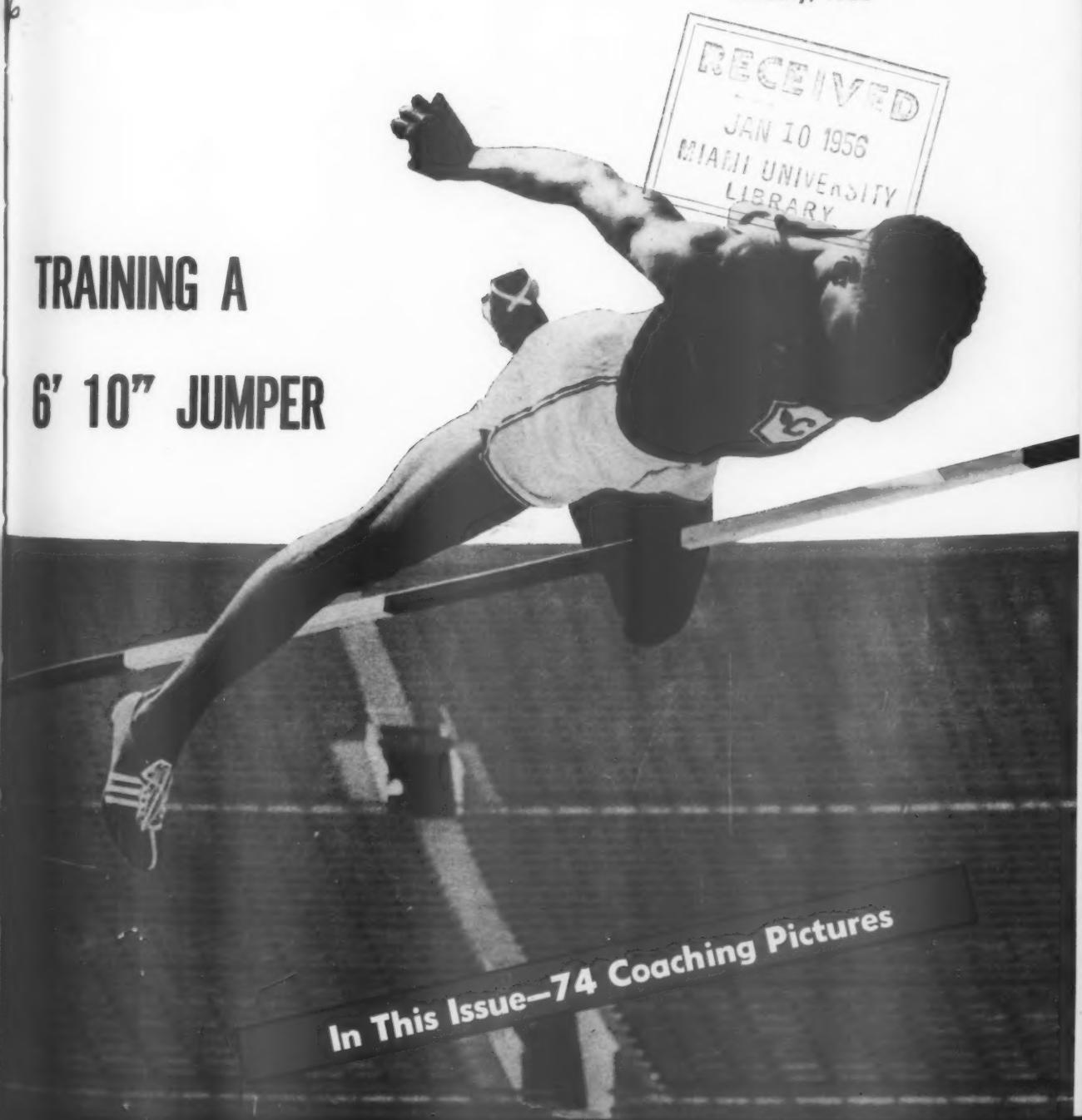
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ATHLETIC JOURNAL

VOL. XXXVI No. 5

January, 1956

TRAINING A
6' 10" JUMPER



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The ATHLETIC JOURNAL

Nation-Wide Amateur Athletics

Volume XXXVI

Number 5

January, 1956

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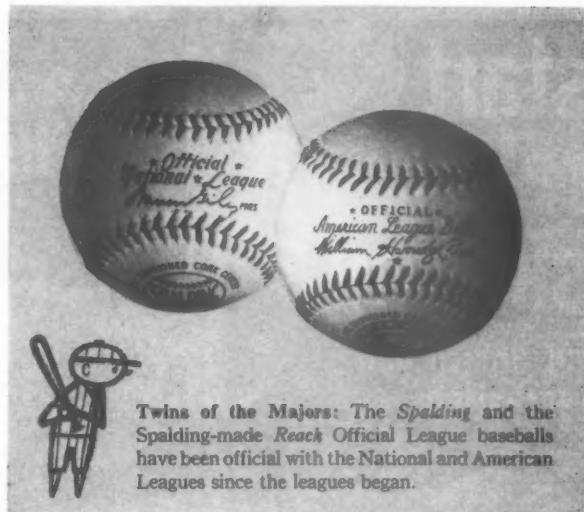
We always try to tie in our front cover picture with one of the featured articles. This time the picture is related to three articles. The first is the article on Charlie Dumas, appearing on page 14, the second is the National Honor Roll, where Dumas led all high school jumpers last year, and the third is the National High School Track Meet, where the jump of 6' 9 1/2" shown here earned 10 points for his state. This picture of the actual jump which set the new national interscholastic record was taken by Lee Hansen.

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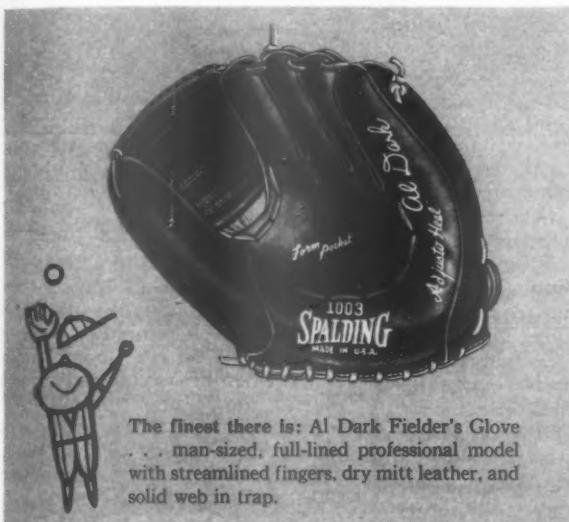
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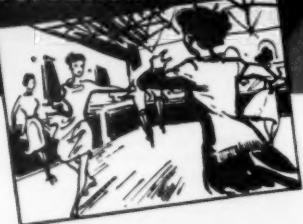
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from here and there

RECENTLY the lettermen's association of the University of Illinois published a directory of its members. Altogether 3240 athletes received a letter of some type, whether it was for a varsity sport or intramural manager. Of course, many of the recipients are deceased and some cannot be located; nevertheless, it is interesting to note that 168 are in coaching today. Of this number 70 are coaching in Illinois high schools and 23 in colleges in Illinois. Of the latter figure 15 are either at their alma mater or at the University of Illinois branch at Navy Pier in Chicago. Thirty-nine are coaching at high schools out of the state and 37 are in college coaching in states other than Illinois. Among these are Alex Agase, line coach at Iowa State, and his brother, Lou, the line coach on "Duffy" Daugherty's staff. Another line coach is George Bernhardt at Arkansas; Bill Heiss is assisting at Denver; Bert Piggott assists at North Carolina A. & T. College and is head coach in track; Merle Schlosser is end coach at Missouri; John Mauer, in addition to being basketball coach, is an assistant on Bob Woodruff's staff at Florida; Roy Wietz assists at Western Michigan; John Evans assists at Vermont, in addition to being head coach in basketball. Another assistant is Perry Moss at Miami (Florida) and Jud Timm is on Charlie Caldwell's Princeton staff. George Walker is head coach at St. Augustine's College in Raleigh, North Carolina; David Strong is head coach at Sacramento State College; and Ed Snavely is head coach at DePauw. In addition to Mauer and Evans, other basketball coaches from the University of Illinois are Royner Greene at Cornell and Floyd Stahl at Ohio State. Greene also coaches the Cornell baseball team and Otto Vogel is the well-known baseball coach at Iowa. Track coaches include Bob Grieve at Syracuse; Chick Werner at Penn State; Bob Chambers at Duke; George Bertelsman at St. Joseph's in Philadelphia; and Paul Sweet at New Hampshire. Coaching wrestling are Willard Kenney, assist-

ant at Washington State; Everett Ryan, assistant at California; and William Tomaras, the head coach at Washington State. Among those in administrative or teaching positions are "Potsy" Clark at California Western College; Doug Fessenden at San Francisco State; Dave Field at Arnold College; Robert Hoskins at Virginia; Albert Humphrey at Bucknell; Walt Jensburg at Ohio Wesleyan; Fred Kasch at San Diego State; Bernie Shively, athletic director at Kentucky; and Leonard Ummus, the athletic director at Northwestern College in Watertown, Wisc.

RALPH MILLER, Wichita's basketball coach, scored a field goal while sitting on the floor. This happened when he was an undergraduate playing on "Phog" Allen's 1941-42 team. Incidentally, this field goal was scored in a game against Wichita. Wichita, by the way, has a brand-new field house which seats 10,000 . . . Ev Shelton, Wyoming's basketball coach, was a 12-letter-man during his undergraduate days at Phillips University. He earned four letters each in football, basketball, and baseball . . . Of interest to all coaches is the new basketball free throw shooting poster put out by Converse Rubber Company. It features a series of sequence pictures of "Bunny" Levitt who holds the record for consecutive free throws made. These posters may be obtained by using the Service Coupon on the last page of this issue and checking under the heading "Books." . . . Harold Bradley, Duke's highly successful basketball coach, has a coaching record which is unique in that his high school and college winning percentages are very similar. His eight-year coaching record at Norwich, New York, High School shows 100 wins and 33 losses for a .752 percentage, and his record for three years at Hartwick College and five years at Duke shows 154 wins out of 213 games for

(Continued on page 66)

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(Series A)

FOOT TRAP

The individual illustrations were demonstrated by Dick Bertz, an Ohio State University varsity soccer player. In the sequences on tackling he was assisted by his teammate, Roy Stambaugh.



(Illus. 1) The player's body weight is on his right or standing leg, with his left or trapping foot free and ready for action. (2) As the ball approaches, his left foot is raised, with the toes and the heel down. (3) Before it hits the ground, the ball is met by the sole of the foot. (4) Now the ball is dead, the player's left foot is free, and his body weight is still on his right leg. (5) The player begins to dribble.



THE international game of soccer continues to gain new adherents in the United States, particularly among college students in the Middle West. Within the last two years, new teams have been organized at the Navy Pier branch of the University of Illinois, the University of Dayton, Akron University, Ohio Wesleyan, and Western Reserve University. Some of the students on these teams are from other countries and have had considerable soccer experience. However, many are American students who have had little or no previous experience in soccer, and it is necessary for them to learn soccer literally from the ground up.

This article was written in the hope that the discussion of techniques and the suggestions for practice will prove helpful to two groups of individuals: players who are learning soccer and coaches who have inexperienced players on their teams. In a previous article, "Fundamental Kicking in Soccer," which appeared in the November, 1951 issue of the *Athletic Journal*, the fundamental skills of kicking, dribbling, and simple traps for a rolling ball were analyzed. This article will present the fundamental soccer skills of trapping for balls off the ground, heading, and tackling. These are all individual skills which every player must develop, regardless of what position he plays.

(Series B)

SIDE OF FOOT TRAP



(Illus. 1) Again we see the player's body weight placed on his right leg, with the left leg free for trapping. (2) His leg is raised ready to meet the ball. (3) The ball is stopped by the side of the player's foot. (4) His foot is pulled back slightly to prevent a rebound and to direct the ball down. (5) Now the player is ready to pass or dribble.



Fundamentals of Soccer

By BRUCE L. BENNETT
Assistant Professor of Physical Education, Ohio State University

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sition he plays. Effective play at each position depends on proper and intelligent execution of these fundamentals. Good team play develops from the co-ordination and integration of individual performance into an organized, co-operative pattern of offensive and defensive maneuvering.

Trapping

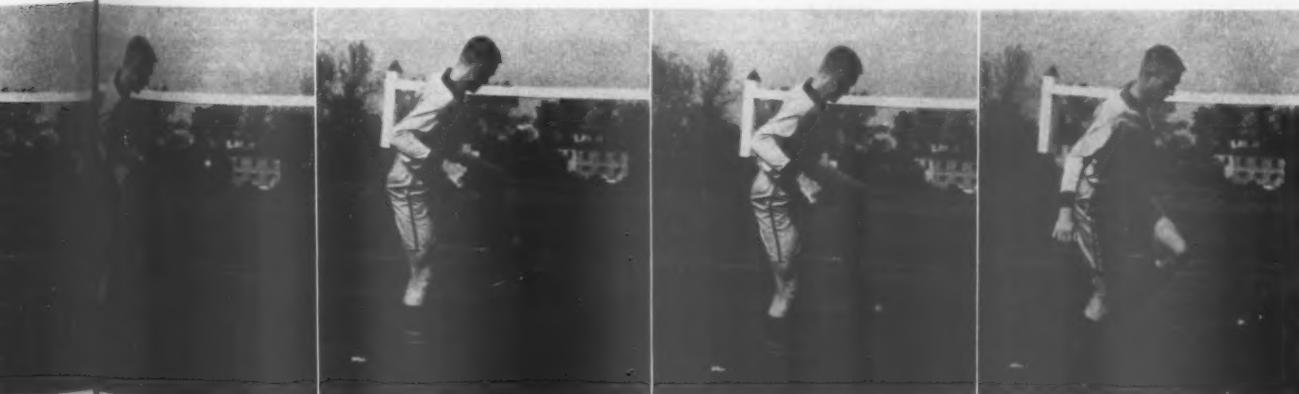
The purpose of all trapping in soccer is to bring a moving ball under control. We mean that the flight of

the ball must be checked in a manner so that it remains within a yard or less away from the feet of the player who is making the trap. A player may stop a ball, but if it bounces 10 or 20 feet away to an opponent, then it is a poor trap. The ball is brought down to his feet so that the player may dribble, pass, or shoot for the goal.

Two principles underlie any type of trap. The first one is to withdraw the part of the player's body that is contacting the ball in order to

cushion the impact and kill the rebound. The second is to angle the contact surface toward the ground in order to deflect the ball downward to the player's feet. Application of these principles to specific types of traps will be described.

The sole of the foot trap may be used successfully for a ball that is coming directly toward a player on the bounce or fly, at any height from the ground to about waist high. The player's leg is extended forward to the height of the ball with his knee



(Series C)

SIDE OF THIGH TRAP

This series is similar to Series B except that the ball is trapped by the inside of the thigh rather than the inside of the player's foot.

slightly bent. He meets the center of the ball with the sole of his foot which is angled somewhat toward the ground. In effect, the ball is knocked to the ground with the bottom of the player's foot (Series A).

When a ball is going by quickly on either side, a player may not have time to get his body in front of it. In this case, he may extend his foot or leg and block the ball with the inside of his foot or thigh (Series B and C). The contacting surface yields gently upon impact and is angled slightly downward. The calf or the leg is seldom used since it does not offer as flat a surface and control is more difficult.

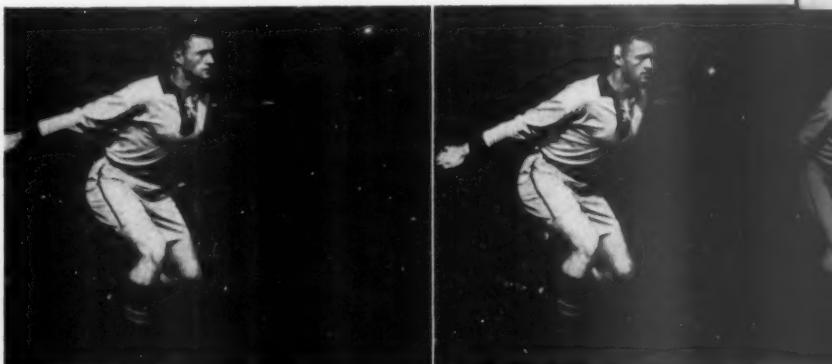
When a player is able to get in front of an approaching ball, he may trap it with his stomach or chest. In either case, his trunk gives with the ball as contact is made and bends



slightly forward to direct the ball down. In executing the chest trap his shoulders should be brought forward to hollow his chest and deaden the rebound. The player's arms should not be held down along his body but should be extended away from it. Body balance is aided, and any chance of the ball touching an arm as it rolls down the body toward the ground is avoided, thus preventing

a foul. The player's legs should be kept fairly straight to give the ball a direct path to his feet. If his knees are bent, the ball may run down off his thighs and roll away (Series D).

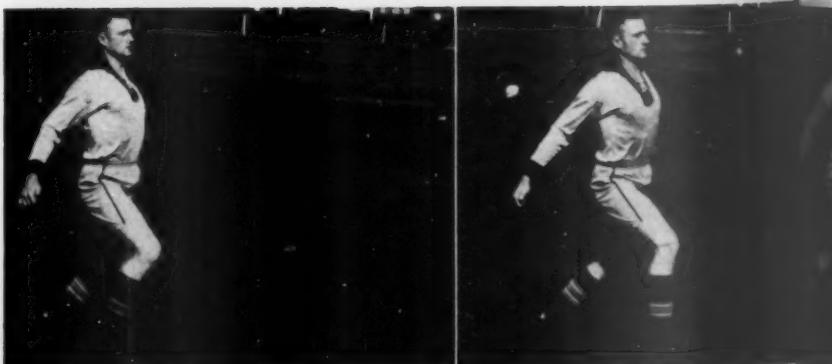
Occasionally, a player may want to advance a ball by using his chest. In this case he expands his chest with his shoulders drawn back to give maximum rebound effect. Often a player expands his chest while he



(Series D)

CHEST TRAP

(Illus. 1) The player's eyes are on the ball and his arms are away from his body. (2) He crouches slightly so that the ball will hit his chest. (3 and 4) The player leans forward and directs the ball downward. (5) With the ball dead at his feet, the player is ready to move.



(Series E)

CHEST TRAP FORWARD

(Illus. 1) The player stands upright, his chest is expanded, and his arms are back. (2 and 3) His eyes are on the ball as it approaches. (4) At the moment of impact his upper trunk is forward and his chest is fully expanded. (5) His body leans forward on the follow-through, driving the ball straight ahead on a line.



should be
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Series D).
may want
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while he

is running, and wants to push the ball past an opponent or even into the goal from close range. Technically this is not a form of trapping, but it is a useful play in a game situation (Series E).

The shin trap is used to kill the bounce of a ball by pinning it between the shin bone and the ground with the player's legs bent. We mention it only to advise *against* its use.

This trap in a game situation puts a player at a disadvantage because he has to stand still and bend his legs for its execution. Thus, he cannot feint very well or move away as quickly after the trap. The sole of the foot trap is definitely preferred. Here, the player's foot is placed on the ball just as it hits the ground. His heel should be kept down and his body weight kept on the standing

foot, not the trapping foot (Series F).

The various traps may be practiced by using groups of four players to a ball and having them take turns throwing the ball to each other at various heights from a distance of five or six yards. At first, the players should simply try to stop and control the ball. Beginners often have difficulty selecting the proper trap accord-





ing to the height of the ball. They may try an inside of the foot trap for a ball shoulder high or squat down to chest trap a ball below the waist. Through practice they will learn to use the proper trap and to move into the right position to use that trap. An individual may improve his trapping ability by throwing a ball against a wall or kickboard and trapping it on the rebound.

The next step is for the player not only to trap the ball, but also to begin a dribble for several yards. There are few occasions during a game when a player can trap a ball

and then look around and decide what to do next. Most of the time he must trap and dribble immediately, pass off, or shoot before a defensive player checks him. An effective drill to emphasize this combination of skills can be used by working in pairs, 10 to 15 yards apart. One player throws the ball to his partner for a trap and then runs forward to tackle him. The receiver traps the ball and moves quickly by dribbling to avoid his oncoming partner.

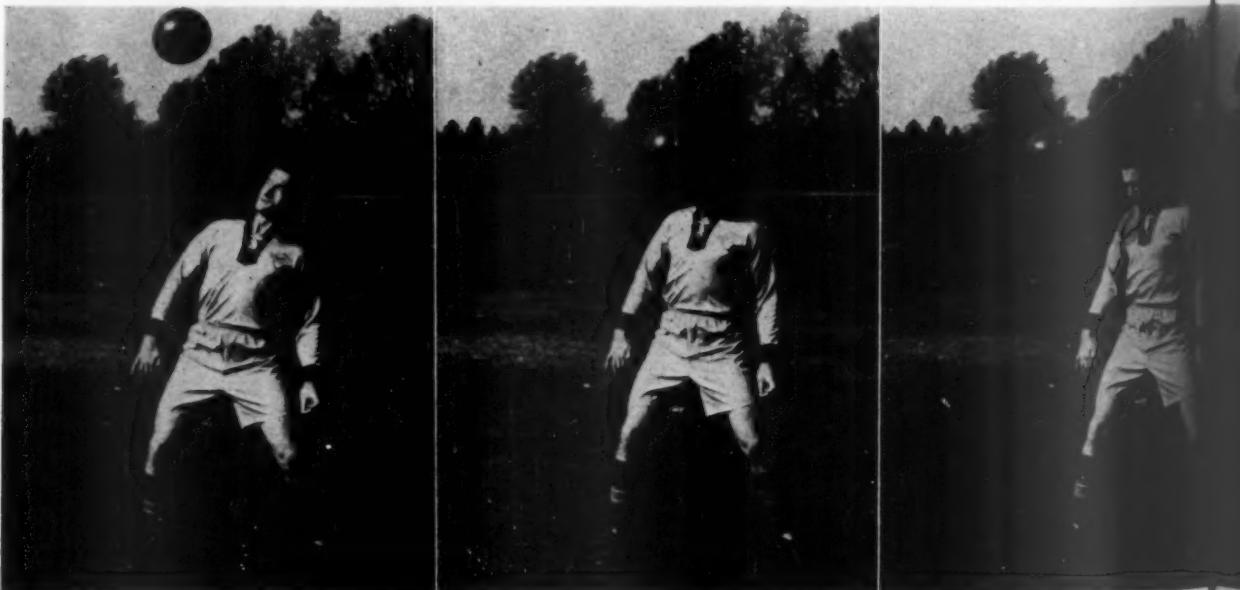
The final step in the progression is to kick the ball from a distance of 20 to 40 yards for trapping prac-

tice. This simulates game conditions

Heading

Heading is a skill of soccer which usually attracts the most attention and interest. It is novel and spectacular. Beginning players generally enjoy learning and practicing the proper technique.

Heading is the skill of volleying a ball with the head. We may ask why not let the ball drop to the ground for a foot trap. By heading, a player will often beat an opponent to the ball. He may head the





(Series F)

SOLE OF FOOT TRAP

This series is similar to Series B except that the ball is met just as it comes off the ground as shown in Illus. 3 and 4.

arms should be extended naturally away from his body to provide better balance and stability (Series G).

For heading a ball to either side, the basic technique is the same except that the player turns his head and trunk in the desired direction as he heads the ball. An alternative technique is not to turn the head but to hit the ball with the side of the head in a nodding motion. This method of heading to the side lacks the power of the forehead technique but is possibly a little more deceptive.

Occasionally, a player may want to head a ball straight on behind him. In this case he lets it hit the top of his head and then lifts his head backwards as though he were trying to follow the ball with his eyes over his head. More skilled players can achieve this result, using the forehead, by means of a vigorous 180-degree turn of the head and body. Actually, there are very few occasions in a game when a player needs to head a ball straight on behind him.

In teaching heading, players should be warned against bending over to head a ball. This is a very hazardous practice in a game because it exposes the player to a neck injury if he collides with an opponent or he may be kicked in the face. Players should be checked carefully for this dangerous practice during the learning stages.

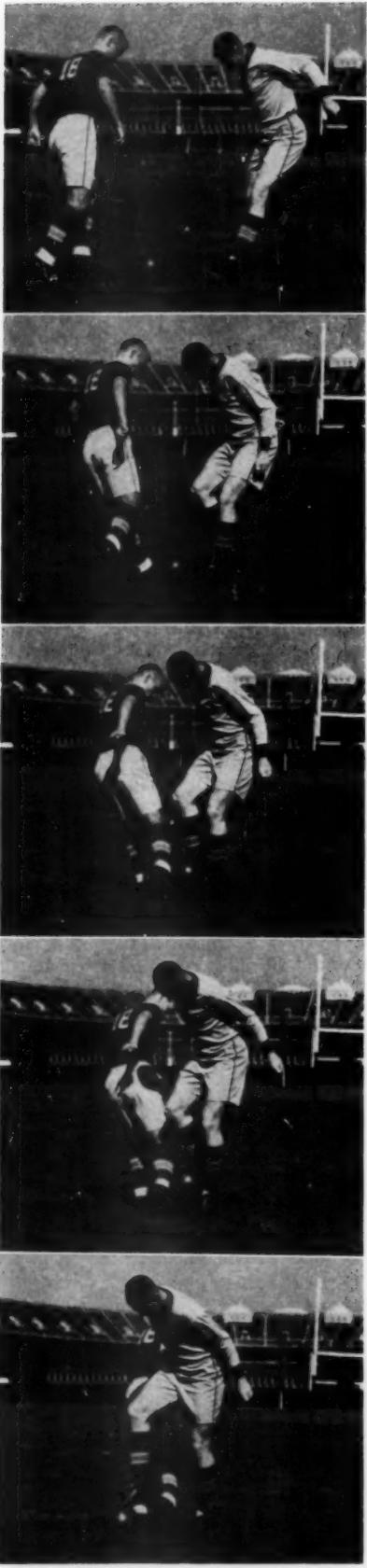
Heading can be practiced by using groups of three or four players to a ball, standing five yards apart. Players may alternate tossing the ball to each other to head. The ball should be tossed 12 to 15 feet in the air.

(Series G)

HEADING



(Illus. 1) The player's eyes are on the ball; his head and trunk are back ready to snap forward. (2) At the moment of impact the player is up on his toes and strikes the ball with his upper forehead. (3, 4, and 5) He employs a vigorous follow-through of his head and trunk to provide power.



(Series H-Left)

TACKLING

This series shows general pictures of a legal tackle. The player's body is upright and his arms are down. The defending player in white is playing the ball.

After a few minutes of this practice, the players will enjoy trying to keep the ball up in the air by a series of heads within their group. One player can stand in the center with three or four in a circle around him. The same player may head the ball twice or more in succession. Group competition can be conducted by having each group count the number of times the ball is headed before it drops to the ground. Group scores can be compared with each other to determine the champion.

In practicing heading for the first few practice periods, it is advisable to keep the practice short, not over five minutes. Short practice will prevent headaches and discomfort which may result from unfamiliarity with the skill and the improper techniques used by beginners.

A player may also secure individual heading practice by working against a wall. He may throw the ball against the wall and head it on the rebound.

After the players have developed ability and confidence in heading, then they should move 20 to 25 yards apart and kick the ball to each other for heading practice. Also, more emphasis should be placed on heading the ball down to the ground rather than in the air. This maneuver calls for more precise timing so that the ball is contacted at the height of the jump and hit downward with the forehead. It is especially important when trying to head the ball into the goal that the player aim for the ground

(Continued on page 55)



(Series I-Right)

TACKLING—Close-Up

(Illus. 1) The defensive player on the right prepares to move in on the dribbler. (2) Now the defender places his weight on his left leg and begins to place the inside of his right foot in front of the ball. (3) The ball is blocked and temporarily pinned between the two players. Notice the defender still has most of his weight on his left foot. (4) The defender flips the ball out with his free right foot and prepares to move. (5) With the ball under control, the defender is on his way.

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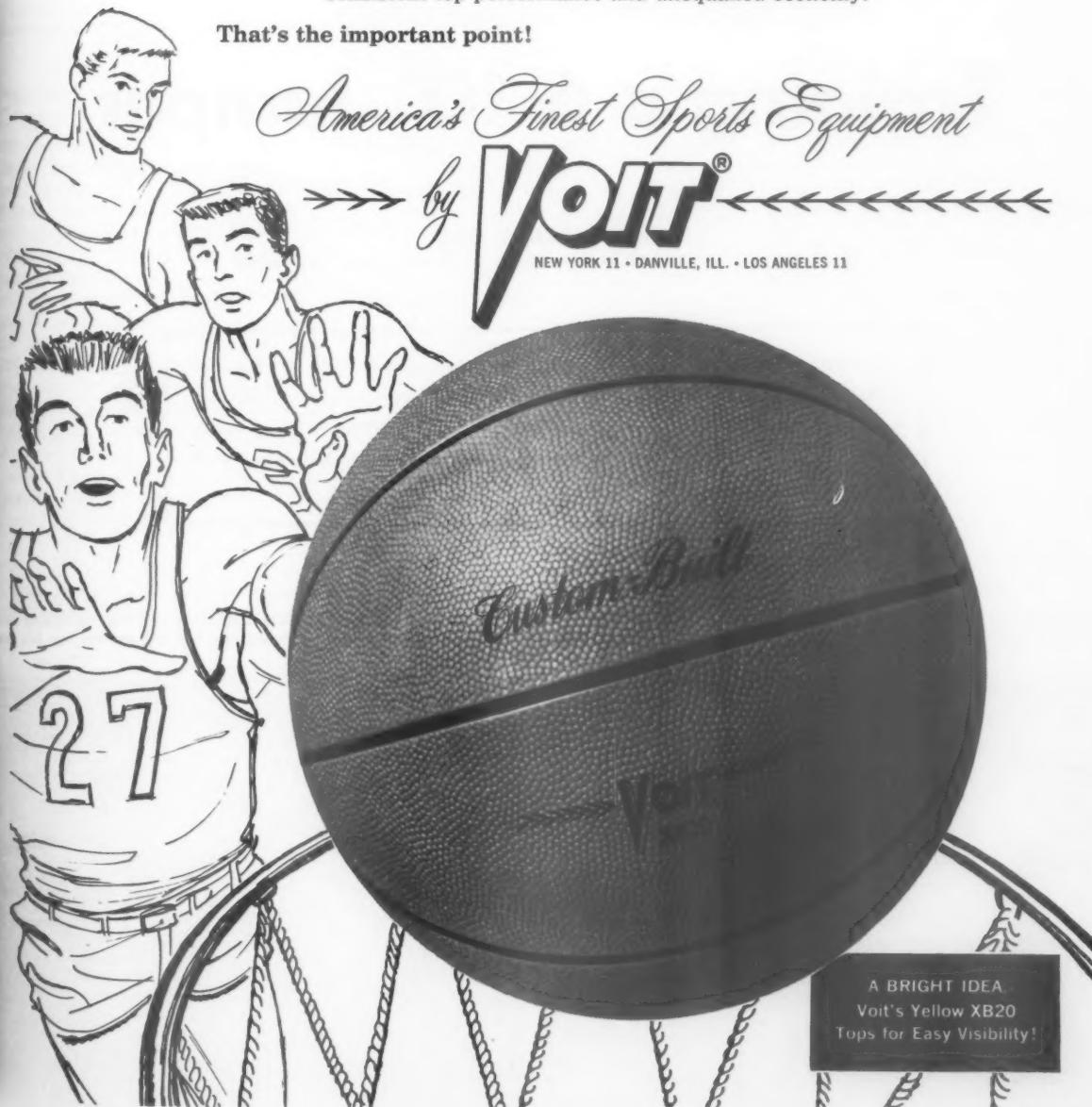
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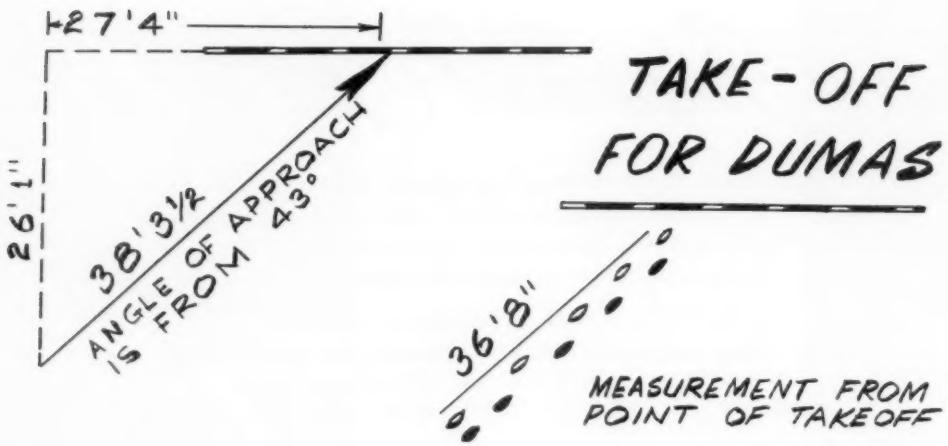
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Training a 6'10" Jumper

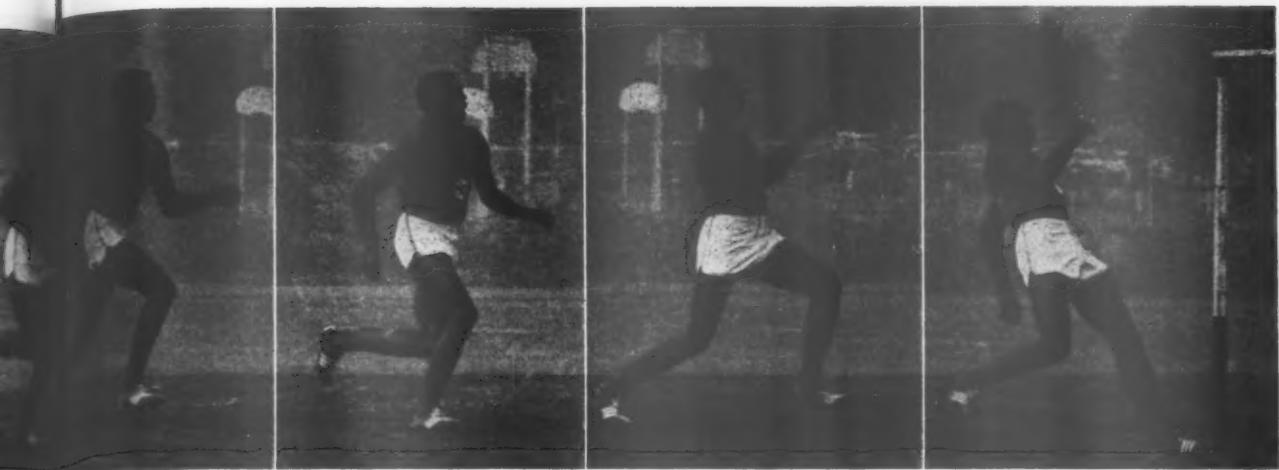
By WILLIAM J. GILL
Track Coach, Centennial Senior High School, Compton, California

One of the outstanding track performances of all time was the 6'10" jump of Charles Dumas last spring while he was still a student in high school. The man responsible for his development was his high school coach, William Gill, to whom we are indebted for this fine article. The accompanying pictures were taken with a "Robot Royal Camera."

The first two pictures below show the continuing motion of tremendous upward lift being generated by Dumas' lead leg and right arm. In the next two illustrations, as his body approaches

the bar to a horizontal position, attention is given to lifting and tucking the left arm and snapping the left leg up for hip lift and leg clearance.





In the first four pictures notice the lengthened stride. The first five steps, not shown, are much shorter in comparison. In the fifth illustration attention is directed to the backward lean of the body

and the ensuing drive and lift that is developing with the lead leg and upward thrust of the right arm.

FLYING at 11,000 feet over the Tehachapi range of mountains on our way to the West Coast Relays in Fresno last May, Charlie Dumas tapped us on the shoulder and said, "Coach, I'm going to jump 6'9" for you tonight — you just wait and see."

We waited and we saw. With 12,000 pairs of eyes glued on the high jump pit, Charlie made the best leap of his life when he sailed over the crossbar at 6'10" to tie Ernie Shelton of USC. These two jumps marked the first time in history when two men jumped that height in the same meet.

It is not much of a strain for us to remember the first time we saw Charles Dumas. A lanky boy, 6'1" tall, carrying about 165 pounds on his frame, he reported to us at Centen-

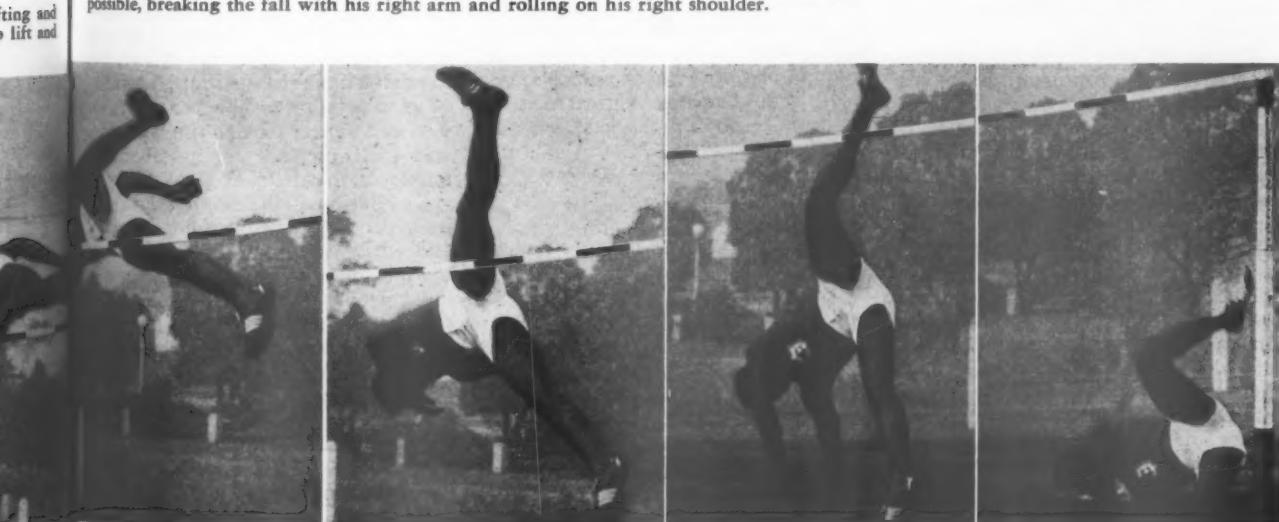
BILL GILL graduated from Fresno State where he was conference champion two years in the 880. Then he competed for the Olympic Club and one year for Great Lakes during the war. Gill has been connected with the Compton School District since the war and has been at his present location for three years. The first year his track team won the league championship, the second year his boys were co-champions of the C. I. F., and the third year they won the conference, the C. I. F., and the state championship.

With the clearance of the bar assured, Dumas relaxes and rolls into the pit as easily as possible, breaking the fall with his right arm and rolling on his right shoulder.

nial High School after completing one year under the capable coaching of Joe Barry and Estel Johnson at Jefferson High School in Los Angeles. As a sophomore he had, as he explained it, "jumped my height but I can go higher even though I'm not growin' any taller." Dumas had plenty of confidence and a mental stability in competition which was quite unusual for a 16-year-old. We knew he would be a good point-getter since he had tied for fourth in the state meet the year before at 6'1". However, we did not know he would develop into the world's greatest prep high jumper and the sixth best of all time.

As a junior, Charlie maintained good consistent jumping throughout the season and recorded a best leap of 6'5½" to win the gold medal in

(Continued on page 64)





Calisthenics for Swimmers

By JACK RYAN

Swimming Coach, University of Florida

The illustration to the left shows the exercise that is used for strengthening the flexor muscles of the thigh and back and to

stretch the ankle joint. On the right is pictured the exercise that is used to stretch the thigh muscles on the extended leg.

AT this time of year swimming coaches all over the country are busy making plans for the coming season. Deciding on a date for the first team practice is one of the thoughts uppermost in a coach's mind. In the majority of cases the initial practice date will probably be determined by counting back from the first dual meet on the school's swimming schedule. If the coach thinks he can get his team ready to swim its first meet after six weeks of swimming practices, then he will set his first practice date accordingly. Of course, methods of determining when to begin early season practices vary with different teams and different coaches. However, we would like to suggest that after setting the date of the first practice for water work, it is an excellent idea to go a step farther and set an even earlier date for the beginning of land drill sessions. By land drill sessions, we mean practices featuring pre-season calisthenics.

The use of land drills as a pre-season activity for training swimmers has a two-fold value for the team. The first, and most apparent, is that it helps the swimmer to prepare his body and muscles for the strenuous activities that lie ahead in the coming competitive season. This is the initial purpose and the main objective we hope to reach in land drills. The second value, and by no means a less important one, is the fact that it is a method by which the team can start training as a unit. In swimming, where workouts vary so much with different individuals and various strokes, it is our opinion that we should try to hold our squad together and work them as a group for as long as possible. This procedure seems to

add immeasurably to the spirit of the group and helps to give the boys a lift as they work and struggle toward their common goal. In addition, it has been our personal experience that the swimmers themselves are convinced of the value of land exercises and feel that they are an extremely worthwhile training activity.

In preparing a list of exercises the coach should remember that each exercise should be of a specific and definite nature. Therefore, his selection should be pointed toward two main functions which the calisthenics should accomplish. These are: 1. To add strength to the muscles used in swimming. 2. To increase the flexibility of the joints.

The coach can use his own judgment on the exact exercises he will want to use. He may wish to make up his own or he may refer to any of several excellent reference works on competitive swimming. A list of exercises which we have found valuable will be listed at the end of the article. The muscles of the back and shoulder girdle should receive a great deal of attention as should the extensor and

flexor muscles of the arms and legs. Of course, in swimming it is well to remember that practically all the muscles of the body come into play.

Land drills such as we have been discussing should be used only as a pre-water conditioner and they should not be carried over into the regular season. When the season is under way, a few simple stretching exercises which are designed to loosen the muscles of the body may be set up for use before the swimmer enters the water. These simple exercises can be assumed to be the responsibility of each individual swimmer, while the land drills should be set up in a more formal pattern.

The swimmers should be required to know each exercise and the order in which they will be given so that after a few weeks time, they can swing from exercise to exercise with no rest in between. To aid the swimmer in becoming familiar with and knowing each exercise, mimeographed copies can be made and distributed to each squad member. It is important that the drills be performed rapidly and in quick succession although it is wise to start at a slower pace in the beginning and then increase the number and tempo of the drills as the weeks progress. Between 45 minutes and one hour can be spent on the drills daily and while there may be much groaning and many reports of terrible stiffness on the part of the squad, the coach will probably notice the pride his team members take in their accomplishments as they near the end of the land work. Most worthwhile team members never seem to mind the hard drills as long as they know they are working toward results in their swimming.

(Continued on page 52)

JACK RYAN competed at Ohio State in 1942, '43, and '47 and was a member of the All-American team in the 220, 440, and 1500-meter free style events. In 1947 he was a member of the 800-yard relay team that holds the world's record. Ryan is in his fourth season at Florida where his teams have been conference champions the last two years.

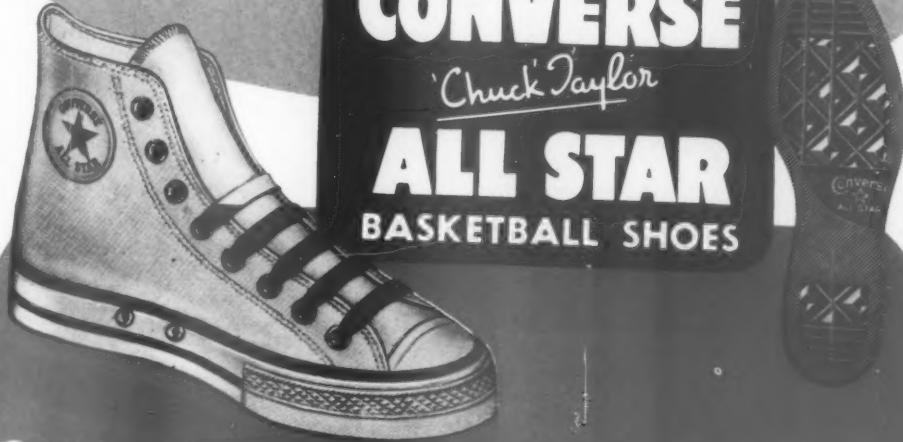
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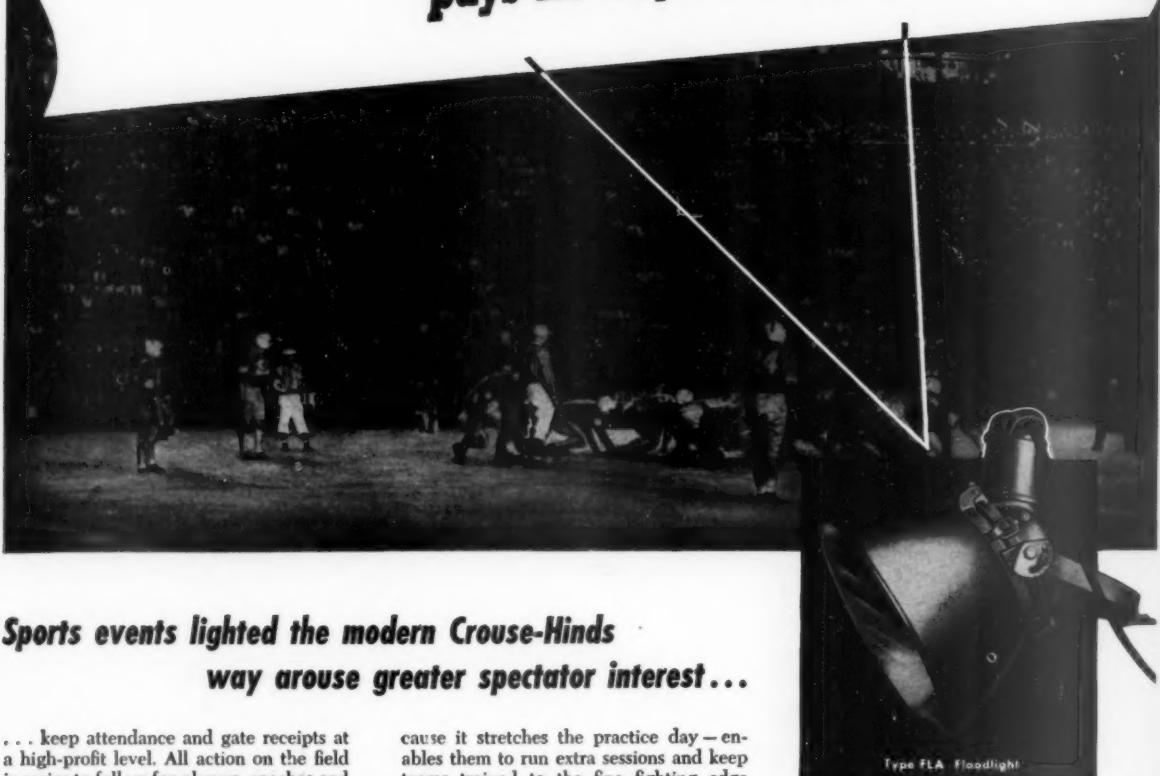
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Store Your Equipment

Helmets on gallon buckets.



Shoulder pads stored four high.



Practice shoes tied in pairs.



Closets for football clothing.

By TROY MONK

Football Coach, Van Vleck, Texas, High School

As a football coach, we have great respect for the proper care and storage of football equipment.

We are always interested in finding a better way to preserve equipment. Our space and facilities for storage of football equipment, in our opinion, are first class, thanks to our superintendent. Cabinets and racks with adequate room for storage purposes have been built which, of course, means a great deal in the care of equipment.

A record is kept of each article issued. This record is used hand-in-hand with inventory procedures and as an aid when we are purchasing new equipment.

When all football equipment has been turned in at the end of the season, the washable items are washed, everything is cleaned that can be cleaned, and all pads are put out in the sun for three or four days to dry out. We use the cull and store procedure.

The following methods are used for storing:

Footballs. Our footballs are cleaned with a liquid cleaner, deflated, returned to the boxes they came in, and stored on a shelf in a cabinet on the balcony of the gymnasium.

Chin Straps. A liquid cleaner and leather softener is used on the chin straps that can be used again. Then they are stored on a shelf near the

headgear where they can be laid flat and not lose their shape.

Down Box. Our down box is cleaned at the end of each football season. If it needs a paint job, it is repainted and then stored in a small closet where other incidentals are kept.

First Down Chain. If repairs are needed on the chain at the end of the football season they are made, and if it is necessary the chain is repainted. Then the chain is stored in the closet with the down box.

First Aid Kit and Supplies. An inventory of first aid supplies is completed at the end of each school year.

Game Jerseys and Pants. Our jerseys and pants are checked and if repair work is necessary they are returned to the manufacturer for this work. Equipment that is in top condition is folded neatly and placed in a ventilated cabinet which has separate compartments for pants and jerseys. New equipment is purchased to replace worn-out items. Moth balls are scattered in these compartments as a protective measure.

Game Shoes. All boxes in which shoes were shipped are retained. Each boy's name is written on the box that contains his shoes. After a game the shoes are cleaned with a liquid solution which also softens the leather and are returned to the respective box

in the equipment room. Worn-out socks are stuffed into the toes of the shoes to help retain their shape.

Headgear. We use plastic headgear that is painted with an orange lacquer, and coated with shellac.

At storage time helmets to be repaired are sent out, and those remaining are stored over gallon buckets. Thus, they receive plenty of air and will not mold. We are located on the coast and equipment collects moisture very easily. By placing helmets over gallon buckets they remain in perfect shape and are ready for use at the beginning of the next football season. If helmets have bars or masks attached, there are stored along with the other helmets because the masks do not hinder the helmets from fitting perfectly over the buckets.

It has been our experience that this method is the best all-around process for the storage of headgear.

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By JAMES SMILGOFF

Baseball Coach,

Taft High School, Chicago, Illinois

ABILITY SITUATION			
	Team A	Team B	Team C
Offense			
Hitting _____	excellent	good	fair
Bunting _____	fair	excellent	good
Base-Running _____	fair	good	excellent
Defense			
Outfield			
(a) speed _____	good	fair	excellent
(b) throwing _____	excellent	fair	good
Infield _____	good	excellent	fair
Pitching _____	excellent	fair	good
Catching _____	fair	excellent	good

PROBABLE TEAM STRATEGY

Team A

(1) Play for the big inning. (2) Use very little bunting. (3) Try some base-running but play it safe. (4) Be very conservative in attempting any steals. (5) Depend on pitching. (6) The good defense means the opponents will need many hits to score. (7) Work with the catcher more; opponents will run on him.

Team B

(1) Infield defense is strongest point. (2) Pitchers should pitch low to depend on infield. (3) Much bunting. (4) Play for the breaks with a fair amount of base-running. (5) Use the fake bunt and hit. (6) Squeeze occasionally. (7) Opponents will take extra base and will play for the big inning quite often.

Team C

(1) Do not play for the big inning but accumulate runs as the game progresses. (2) Use some bunting. (3) Wait out the pitchers for walks. (4) Use the run and hit. (5) Try some fake bunt and hit. (6) Use some hit and run. (7) Use squeeze often and try stealing home. (8) Depend quite a bit on pitching.

STRATEGY can only be justified in terms of successful application and manipulation. There must be sound, basic, and logical reasoning behind strategic maneuvers in order for a team to enjoy successful strategy. In order to be successful, strategy must be planned, and, generally speaking, the framework of all strategy is built, planned, and supported by the pillars comparative strengths and weaknesses of the offense and defense. Imagination and the courage of the coach's or manager's convictions motivate the strategy toward completion.

Strategy should be evaluated continually in terms of its potential. It should be evaluated before, during, and after the baseball season. It should be reviewed before and after each game. The aspect of flexibility in order to invite sudden and necessary change must always be present. Flexibility is a condition which affects strategy. There are numerous factors to be considered in planning and evaluating strategy. They are as follows:

Weather Conditions. Weather conditions play an active part in determining the proper strategy for the day. Should the weather be quite cold,

there is reason to believe that good hitting will be difficult. Many times batters dislike hitting in cold weather, due to the uncomfortable and painful stinging of the hands when the ball is not hit squarely. In this situation it might prove advisable for a team to bunt more often, and hit and run, or steal more frequently.

Wind conditions affect strategy. With a strong wind blowing against the batter, successful batting becomes more difficult, thus modifying strategy. On the other hand, this same wind condition is conducive to better fast ball pitching, while a strong wind current, with the batter, and against the pitcher, usually is an aid to an improved curve ball. A cross wind blowing from first base toward third base, or vice versa, is of neutral consequence.

Extremely hot weather can prove physically exhausting to pitchers, thus necessitating an occasional change in pitching selection and strategy. Often bunting helps to speed up the exhaustion of a pitcher by making him extend himself in the fielding process.

Field Conditions. The distances to fences, the open or closed field, the

grass or skin infield, the slow or fast infield, and fast or slow running conditions affect strategy.

At times a short fence is inviting to the strategy of the slugging game and the big inning. Grass infields are usually smoother and slower than skin infields, which may influence a bunting and squeeze play type of game. The fast infield may influence strategy in favor of hitting and the hit and run. Base stealing strategy is definitely affected by slow and muddy or dry and fast running conditions.

Comparative Strengths and Weaknesses of Both Teams. Major factors in determining the general strategy to be used often revolve around the comparative strengths and weaknesses of the competing teams. An inventory of the strong and weak points will indicate where the strategic emphasis should be placed. It brings into focus a visual image of the potential of both teams, and also provides a map upon which to chart strategic maneuvers.

Offensive Strengths. A comparative analysis of the hitting ability of both teams should prove enlightening. Teams that depend solely on batting strength to win games are usually sec-

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ond division teams. The same holds true in the case of fighters who depend on slugging it out and are often defeated when they depend on one fundamental element of the game for success. Teams that have considerable hitting strength may play for the big inning oftener and longer than teams with mediocre batting strength. The latter may have to rely more on bunting, base-running, good defensive play, and pitching.

Bunting Ability. When a team has good bunters it should play often for the one run, and try to accumulate sufficient runs to win the game. This type of team frequently plays a conservative game at the plate, and depends a good deal upon capitalizing on the defensive mistakes of the opponents.

Base-Running Ability. Teams with running speed should capitalize on that speed. However, the problem usually encountered is how to get these players on the bases where they will do the most good, and thus help the team. Players who are speedy runners should work on the different types of bunts for the base hit. They should also wait the pitcher out and try to work him for a base on balls more often in order to increase the possibility of getting on base, and in turn increase their potential and opportunities in base-running.

A team that has base-running speed can afford to attempt steals often. This type of team should also employ the run and hit, and the hit and run plays frequently.

Comparative Defensive Strengths and Weaknesses. From the defensive standpoint, the speed of the outfield in covering ample territory, and the throwing ability of the outfielders, are two tangible items that can be evaluated. A speedy outfield leaves less outfield space for base hits, thus minimizing the offensive potential, and turning their attention to other means of getting on base. The opposite is true in the case of the slow-running outfield.

An excellent example of the value of outfield speed and throwing strength was exemplified by Willie Mays of the New York Giants in 1954. The Giants finished 35 games out of first place in 1953, yet with practically the same personnel plus Willie Mays in center field won the pennant in 1954. While all the success of the Giants in 1954 cannot be attributed to this colorful baseball player, few will dispute that he played a major role in his team's success.

Infield Stability. Another defensive factor to be evaluated in terms of team strength or weakness is infield stabil-

ity. A stable infield lends moral and physical support to the pitching staff. Mediocre pitching can look good when it is supported by a stable infield. This type of infield would make few errors, would have accurate throwing arms, and strong arms for close plays and relay purposes. Occasionally, they would make the tough play to take the pitcher out of a tight spot, and the team out of an inning.

The double play ability of an infield is a factor in evaluating defensive success since it is a factor in determining game strategy. When a manager or a coach has a good double play combination he can have his infield play back, rather than in to cut the run off at the plate, because playing in decreases the defensive potential. Occasionally, the good double play infield will take their team out of the inning and cut short the opposing team's rally, thus giving up few runs while playing back.

Pitching and Catching. It is our

IM SMILGOFF graduated from Wisconsin where he played under Art Mansfield. Since that time he has been closely connected with the game. His Taft High School teams are perennial contenders in Chicago high school circles. Smilgoff has scouted for the Cubs and conducted baseball camps. Soon to be published is a baseball text which he has written.

feeling that pitching and catching as defensive factors can be reviewed appropriately from an individual point of view since team strategy will differ as different pitchers each take a turn on the mound. A similar condition prevails in the case of the catching selection for the day.

Strengths and Weaknesses of Individual Personnel. Pitching constitutes the largest percentage of defensive strength. It has been estimated at more than 50 per cent of a team's defensive ability by most managers and coaches of professional teams. In amateur baseball it is probably greater due to less hitting ability at this level.

While an entire pitching staff can be evaluated in terms of group strength, a more reliable strategy will result when that strategy is selected in terms of the individual pitcher who is on the mound at the time. Simply stated, a manager or coach will use one type of strategy when his top pitcher is on the mound, and another

type of strategy when his mediocre pitcher is in the game.

One type of defensive strategy may be employed when a left-handed pitcher is on the mound, while another strategic maneuver will be attempted with a right-handed pitcher. Pitching percentages of success will vary according to the type of batter facing these types of pitchers. This circumstance in itself dictates the type of strategy to be used.

In close games, where one pitch can determine success or failure, the pitcher's best pitch can be a determining factor in the defensive strategy. In this type of situation, a pitcher with a good, high, fast ball may be replaced by a sinker ball pitcher in order to make the batter hit the ball on the ground, particularly with one or none out and the tying or winning run on third base.

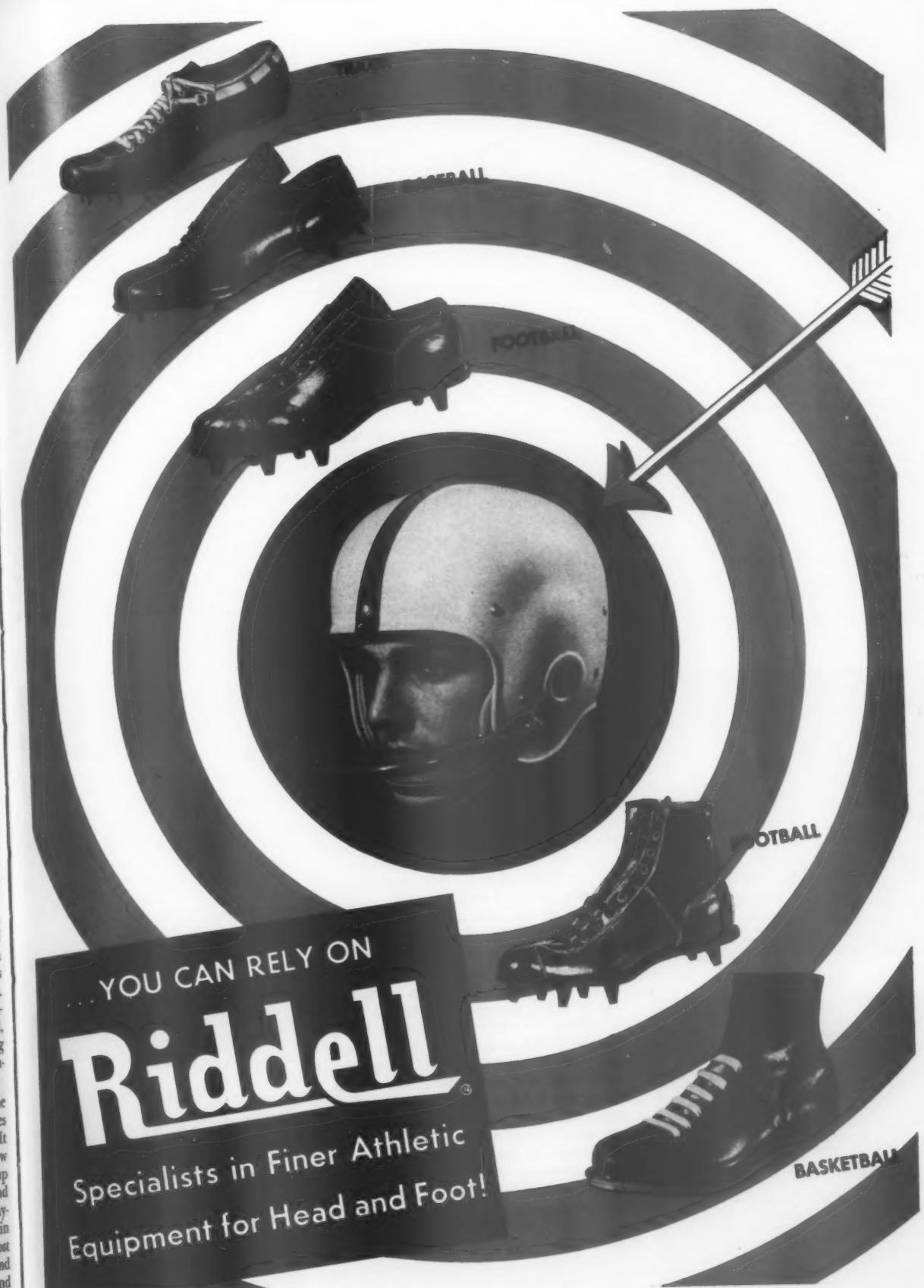
When a top pitcher is on the mound, a manager or coach may play for one run throughout the game, hoping that a few runs will be enough to win. With mediocre pitching, against the same opposition, that same manager may decide to play for the big inning, figuring that more than a few runs will be necessary in order to win that game.

The Type of Throwing and Thinking Catcher. A good arm and a sound thinking pattern in calling pitches are the two most important attributes in the catching defense. The former is more easily measured. With runners on the bases, a good throwing catcher commands respect from the opposition, and influences the offensive and defensive strategy. This is particularly true with runners on first and third. A good throwing catcher can also take a team out of a tight spot by occasionally picking a runner off base.

From the thinking point of view, a smart catcher can take a team out of an inning by just one good call of a pitch. In many games one pitch is the difference between a win or a loss. Smart catchers are of tremendous influence on the stability of the infield, and on the success of the pitching staff. They also influence the manager's or coach's strategy.

Good Hit and Run Players. The hit and run play has many advantages from the offensive standpoint. It should be attempted most by the few players who do it best. The line-up should be planned with the hit and run in mind. Good hit and run players should be placed in a position in the line-up that will produce the most opportunities for this play. Hit and run players keep an inning alive and

(Continued on page 60)



Take-Downs

By STEVE HARRICK

Wrestling Coach, West Virginia University

THE most important factors in coaching wrestling are simplicity of method and organization of content. The sport requires unlimited patience on the part of both the coach and the participants in perfecting the basic fundamentals.

In the beginning it is assumed that

Posing for the pictures are Southern Conference champions, Bob Perry in the white jersey, a three-time winner in the 123-pound class,

the boys who report for wrestling do not know anything about the sport. As a rule, that is the way we receive them at West Virginia University.

Detailed fundamentals of wrestling are stressed, and if a student has been taught differently in high school, we try to change his style to conform to

our pattern. At times it is very difficult to make this change, and if the boy does not respond then we try to improve his style for better performance. If a student reaches the point where wrestling bores him and he is no longer interested in perfecting

(Article continued on page 28)

and Bill Pritchard in the black jersey, winner in the 137-pound class. For convenience, the wrestler wearing the white jersey is designated as W and the boy wearing the black jersey as B.

Illustration 1 shows the starting stance. The wrestlers assume a relaxed and comfortable position, one foot slightly in advance of the other, feet wide enough apart to assure balance and speed of movement, knees slightly bent, body inclined forward at the waist, and hands shoulder width. A wrestler should lead with the hand that corresponds to his leading foot, and his weight should be distributed equally on both feet. Notice the difference in the two stances.

The locked position from standing is shown in Illustration 2. This position seems more natural for beginners when they are attempting to take an opponent to the mat. W places his right hand on B's neck, his left hand on B's right upper arm, and his forehead is resting in the hollow of B's right shoulder. B has the same hold on W. From this position the contestants spar for an opening in an attempt to find the weakness of the other.

Illustrations 3 and 4 show the double leg take-down. From the locked position W lifts upward on his opponent's right arm and at the same time drops his knees close to B's feet. Then W grasps B's legs behind the knees, with his head on

the outside of his body. W drives B over backward or lifts him over his right shoulder and drops him to the mat for a take-down.

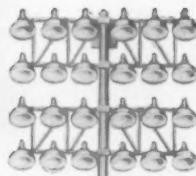




SWIMMING POOL



BASEBALL FIELD

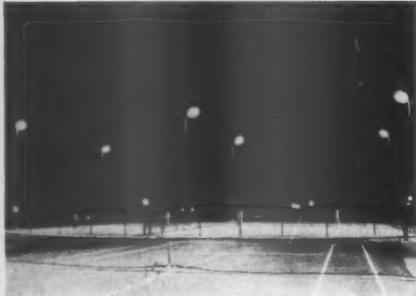


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The counter for the double leg take-down is shown in Illustrations 5 and 6. By using the cross-face hold, W is successful in grasping B's legs. After W takes or grasps B's legs, as shown in Illustration 3, B places his right forearm across W's face and grasps his upper left arm with his right hand. B's left hand is over W's buttock.

From the position shown in Illustration 5, with B's weight resting on W's shoulders and his knees off the mat, B extends his legs forcefully, causing W to break his grip on the leg hold. Then B pivots on W's back to his left and assumes the top-side position of advantage.

Illustrations 7, 8, and 9 show the single leg take-down. From the locked position, Illustration 2, W attacks his opponent's right leg by dropping to his left knee close to B's right foot. Then W shifts his weight to his right foot and grasps B's right leg behind the knee with his left hand.

From the position shown in Illustration 7, W then drops to his right knee, lifts upward on B's right leg, forces him to the right with his head, and finally to the mat for a take-down. W maintains contact with his head against B's side of the neck.

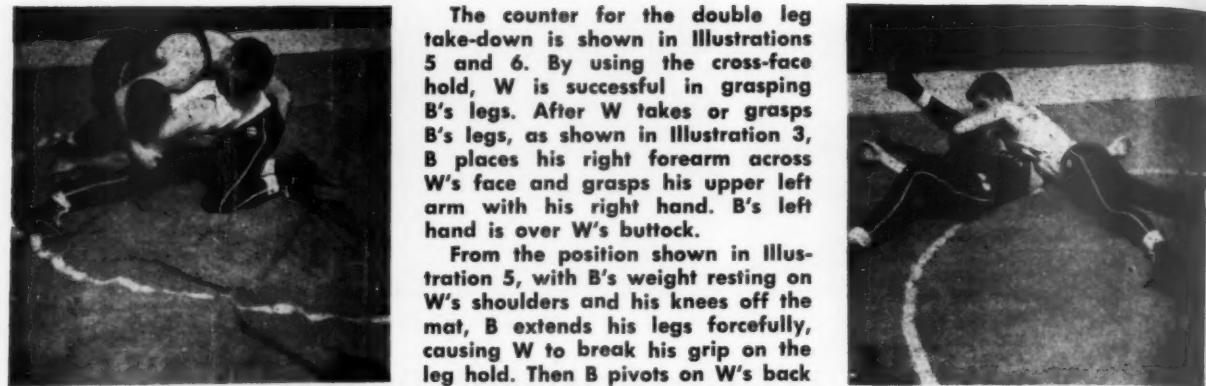
Some boys find it easier to take the single leg hold from the locked position by jumping quickly to the left so that their right knee will be on the mat close to the opponent's right foot. From this point the procedure for a take-down is the same as described previously.

W completes the take-down with a cradle hold for a fall by placing his right arm around B's neck, his left around B's right leg, with his thumbs and fingers locked in a tight grip. This is an excellent pinning combination and can be applied from many positions.

The counter for the single leg hold is shown in Illustration 10. When W is successful in getting B's leg, B drives forcefully in the direction of W's left knee, which is on the mat and he should gain the top-side position of advantage.

However, it is easier for a wrestler to step away when an opponent attempts to grasp his leg or legs for a take-down.

Illustrations 11, 12, and 13 show the arm-under-arm take-down with a lateral drop. W and B have identical positions on each other. Each wrestler has his arm under the opponent's left arm and a firm grip with the left hand on the opponent's upper right arm. Both wrestlers

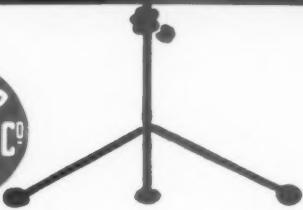
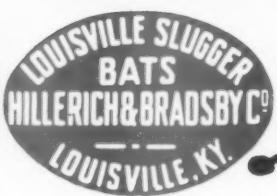


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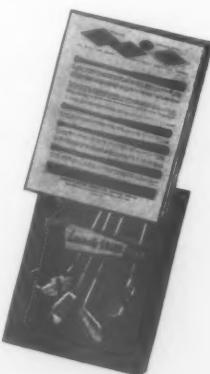
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move about for a possible advantage.

B is pushing against W. W resists and then suddenly changes position



by throwing his legs deep under B's body, with his left leg on the outside and his right leg on the inside of B's right leg.

W hits the mat on his buttock, pulls downward on B's right arm with his left hand, and forces him on his back in a circular motion with his right arm.

When W takes B to the mat, as shown in Illustration 13, B aids W in the circular motion by forcing him on his back with a roll.

The head-under-arm take-down is shown in Illustrations 14, 15, and 16. From the locked position, Illustration 2, B slides his right hand from W's neck and grasps his upper left arm. Then B places his head under W's left armpit, and at the same time takes an inside crotch hold with his left hand.

B quickly throws his legs deep under his opponent, one leg on either side of W's left leg, hits the mat on his buttock, pulls down on W's left arm, pivots on his right

wrestling technique, he will never perform above the mediocre level.

Prior to starting practice on wrestling holds, the boys go through a series of warm-up exercises to develop the muscles of their bodies which are necessary for wrestling, and loosen up enough to withstand sudden strain on these muscles. Some of these exercises are finger tip push-ups, rope skipping, sit-ups, rope climbing, pulley weights, body bending and stretching, bridging, and spot running. Spot running consists of rapid foot movements for 10 seconds, followed by a 10-second rest period.

Footwork Drills

From the fundamental stance, described in Illustration 1, the boys are drilled for several minutes on footwork. Footwork means moving the body in order to be in the best balanced position for attack or defense. It is necessary that the wrestler's feet be directly under his body when he is circling left and right, and advancing and retreating with short shuffling steps.

In teaching take-downs, the beginners are started from the locked position which is shown in Illustration 2. It seems natural for a novice to attack from this position. We demonstrate the hold slowly step-by-step, and repeat it several times. Then the participants are paired off so they are as near equal in weight as possible for safety's sake and ease of learning

while practicing. After a short drill, mistakes are corrected and the demonstration is repeated. Pointing out mistakes is one of the most important factors in successful teaching. The holds should be practiced in slow-motion by the participants until they acquire the muscular feel of them. Then additional practice will be necessary in order for the boys to become proficient. It is better for the participants to perfect a few holds than to learn a variety without mastering any.

Training Procedure

Training for wrestling requires right living. A wrestler should have a balanced diet and avoid any food or drink which does not agree with him. Lean meats, milk products, leafy vegetables, fruits, eggs, fish, and fowl are some of the necessary foods. He should avoid pastries, starchy foods such as bread, fried potatoes, and all greasy foods, especially on the day of the match.

A growing boy requires at least eight hours of sleep to rebuild his body after fatigue and in order for him to be at his very best for a wrestling contest.

Our practice periods are arranged to simulate actual wrestling maneuvers in order that the participants may develop strength, balance, speed, skills, and good physical condition. One hour a day of well-organized wrestling practice is sufficient for the growing boy.

knee, and comes on top for a take-down.

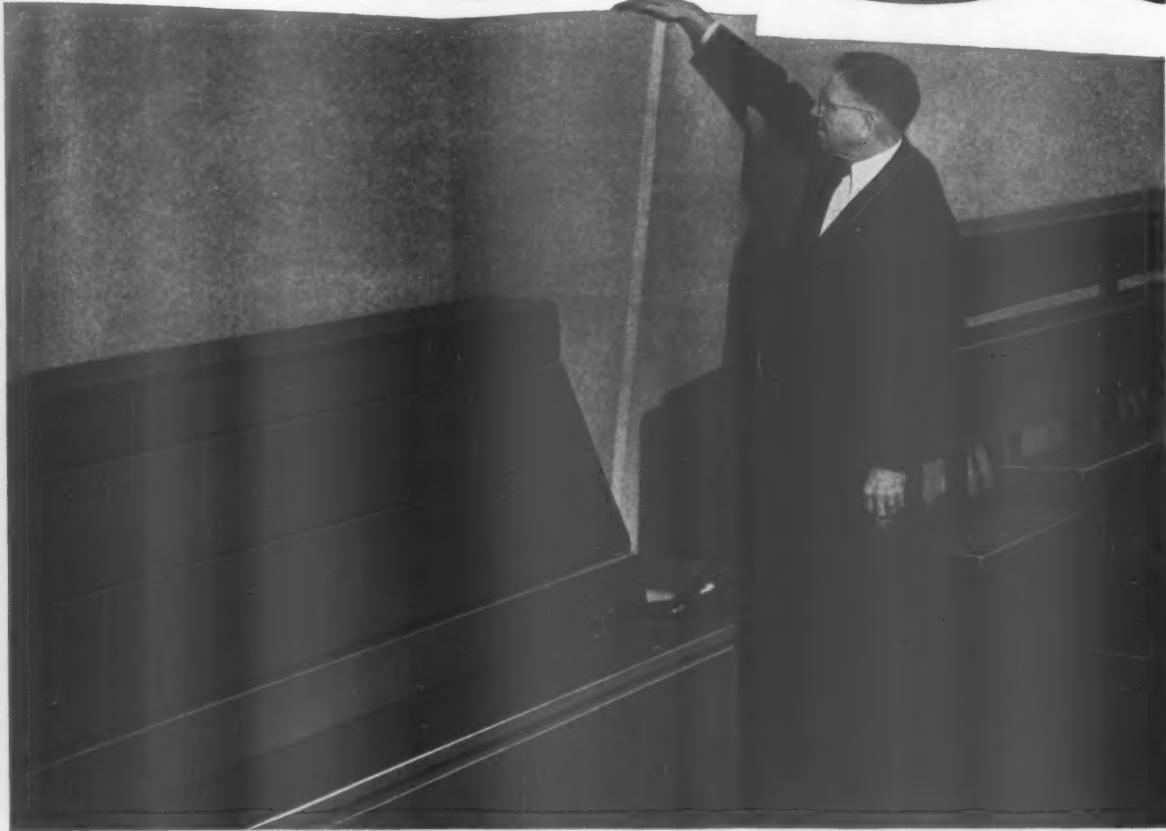
B is now in position to pin W's shoulders to the mat, using a combination crotch and nelson hold. His right hand is around W's neck and his left hand is in his crotch. Or B can take W's right leg at the knee with his left hand and place his

right hand around W's neck for a cradle hold.

When B starts the spinner, W throws his weight back away from B with his legs extended, or he can lock his hands across B's back and force him to the mat on W's right side, lock his legs around B's left leg, and gain a fall.



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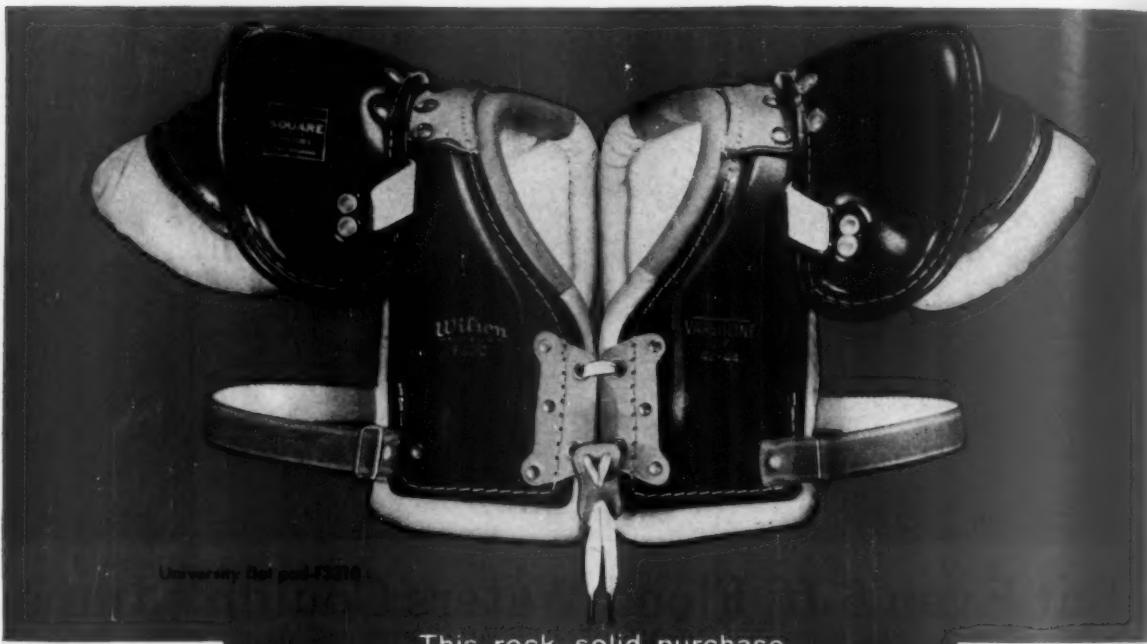
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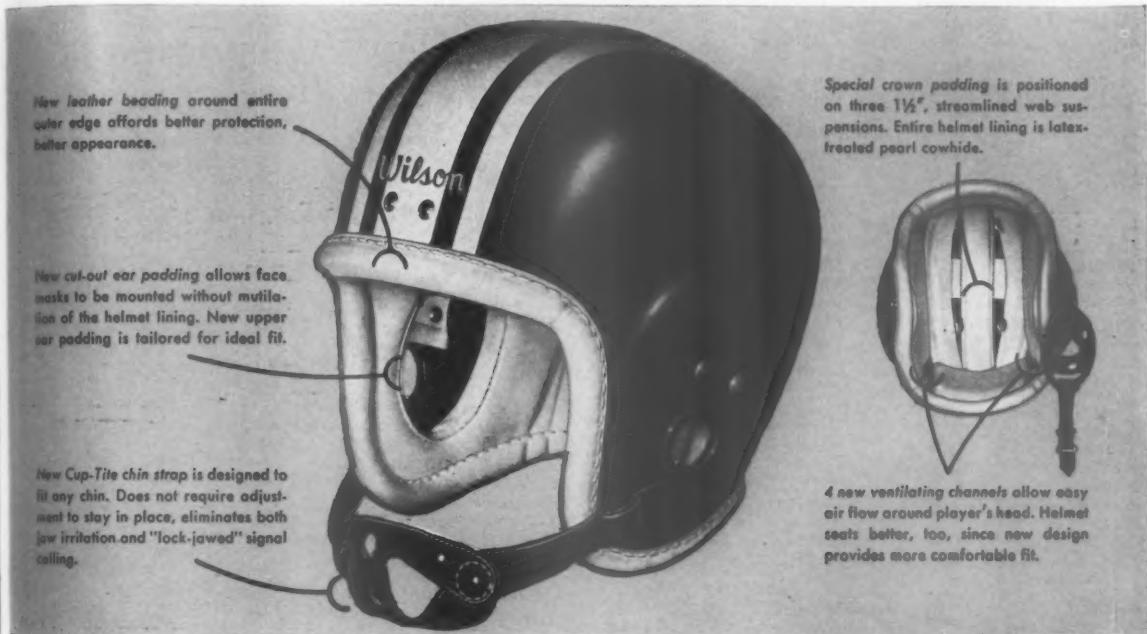
New WEB LOCK feature keeps epaulets from skewing. Unique locking action of webbing, attached between epaulet and double cap, means epaulet can't be smashed into wearer's neck or face. Same construction eliminates hinge tears, too.

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National Honor Roll

Competitor and School	Meet	Time	Competitor and School	Meet	Time			
100-Yard Dash								
Dennis (Centennial, Compton, Calif.)	So. Sec. Finals	9.6	Tillman (Clay Center, Kans.)	State	14.4			
Cannon (Istrouma, La.)	State	9.7	Beard (Thorndale, Texas)	State	14.4			
Gainey (Colorado City, Texas)	Sandies Relays	9.7	Burkes (Abilene, Texas)	Sandie Relays	14.4			
Dorland (Andrews, Texas)	Permian Basin Relays	9.7	Krowel (Mt. Diablo, Concord, Calif.)	No. Coast Div.	14.4			
Diebitsch (Fort Stockton, Texas)	District	9.8	180-Yard Low Hurdles					
Lunday (San Jacinto, Houston, Texas)	Galena Park Relays	9.8	Tidwell (Independence, Kans.)	State	18.5			
Strand (Forest, Dallas, Texas)	State Prelim.	9.8	Weippert (Toms River, N. J.)	State Conf. Inv.	18.7			
Watkins (Port Lavaca, Texas)	Alice Inv.	9.8	Alsbrook (Bell, Galveston, Texas)	State	18.8			
Dant (Alpena, Mich.)	State	9.8	Lowe (Centennial, Compton, Calif.)	So. Sec. Finals	18.9			
Tidwell (Independence, Kans.)	State	9.8	Tillman (Clay Center, Kans.)	State	19.0			
Kellogg (El Camino, Sacramento, Calif.)	Sac-Joaquin Sectional	9.8	Southern (Sunset, Dallas, Texas)	Dallas Inv.	19.1			
Williams (Libbey, Toledo, Ohio)	State	9.8	Buck (Froebel, Gary, Ind.)	State	19.1			
Mitchell (Fort Stockton, Texas)	District	9.8	Martin (Phillips, Chicago, Ill.)	State Semi-Finals	19.2			
Harber (Lubbock, Texas)	Brady Relays	9.8	Shuford (Alice, Texas)	Hub City Relays	19.2			
Jackson (Richmond, Calif.)	Sequoia Inv.	9.8	Prestige (Chilton, Texas)	State	19.2			
220-Yard Dash								
Southern (Sunset, Dallas, Texas)	State	20.7	Brewer (North, Phoenix, Ariz.)	Arizona Relays	14.2			
Gainey (Colorado City, Texas)	State Prelim.	20.9	Hren (Inglewood, Calif.)	So. Sec. Semi-Finals	13.494			
Wiebe (Newton, Kans.)	State	21.0	Finney (Jordan, Los Angeles, Calif.)	City	13.7			
King (Salinas, Calif.)	Coast Counties	21.1	Bullard (North, Phoenix, Ariz.)	Glendale Inv.	13-6%			
Mitchell (Fort Stockton, Texas)	District	21.1	Herrington (Wm. S. Hart, Newhall, Calif.)	So. Sec. Semi-Finals	13-4.94			
Cannon (Istrouma, La.)	State	21.2	Franta (Mansfield, Ohio)	O.H.S.A.A. Relays	13-2%			
Ringgold (Central, Bel Air, Md.)	State	21.2	Dooley (Braman, Okla.)	Aggie Relays	13-2%			
Kellogg (El Camino, Sacramento, Calif.)	Sac-Joaquin Sectional	21.2	Matejka (Sequoia, Redwood City, Calif.)	Sequoia Inv.	13-2			
Poynter (Pasadena, Calif.)	So. Sec. Finals	21.2	Field Events					
McIntire (Gardner, Kans.)	State	21.2	Pole Vault					
440-Yard Dash								
Southern (Sunset, Dallas, Texas)	State	47.2	Brewer (North, Phoenix, Ariz.)	Arizona Relays	14-2			
King (Salinas, Calif.)	Coast Counties	48.3	Hren (Inglewood, Calif.)	So. Sec. Semi-Finals	13-4.94			
White (Corcoran, Calif.)	State	48.7	Finney (Jordan, Los Angeles, Calif.)	City	13.7			
Hambright (Tyrone, Pa.)	State	49.1	Bullard (North, Phoenix, Ariz.)	Glendale Inv.	13-6%			
Austin (Washington, South Bend, Ind.)	State	49.1	Herrington (Wm. S. Hart, Newhall, Calif.)	So. Sec. Semi-Finals	13-4.94			
Neal (Jordan, Los Angeles, Calif.)	City Prelim.	49.2	Franta (Mansfield, Ohio)	O.H.S.A.A. Relays	13-2%			
Walker (Amarillo, Texas)	Red Raider Relays	49.2	Dooley (Braman, Okla.)	Aggie Relays	13-2%			
Chesarek (Riordan, San Francisco, Calif.)	No. Coast Sec.	49.2	Matejka (Sequoia, Redwood City, Calif.)	Sequoia Inv.	13-2			
880-Yard Run								
Mosshart (Abilene, Texas)	Dallas Inv.	1:54.3	High Jump					
Shankland (Union, Phoenix, Ariz.)	Luke Greenway	1:54.5	Dumas (Centennial, Compton, Calif.)	State	6.9%			
Cunliffe (Claremont, Calif.)	So. Sec. Finals	1:54.7	Freeman (DePorres, Cincinnati, Ohio)	District	6.7			
Scurlock (Greensboro, N. C.)	State	1:56.2	Jefferson (El Cerrito, Calif.)	Stockton Relays	6.6			
Williams (Staples, Westport, Conn.)	State	1:56.5	Torrence (Grant, Del Paso Heights, Calif.)	Stockton Relays	6.6			
Sturgeon (Castleton, Ind.)	State	1:56.6	Maugham (New Castle, Pa.)	State	6.5%			
Havens (Avenal, Calif.)	Shasta Divisional	1:56.7	Lyons (North 5 th , Fort Wayne, Ind.)	Regional	6.5%			
Gaines (San Bernardino, Calif.)	Citrus Belt League Finals	1:56.8	Smith (York, Nebr.)	State	6.5%			
One Mile Run								
Shutka (Morris Hills, Rockaway, N. J.)	State	4:19.5	Dailey (Hayward, Calif.)	State	6.5			
White (Newport Harbor, Calif.)	State	4:20.0	Thornton (Aspermont, Texas)	State	6.5			
Rogers (Grossmont, Calif.)	So. Sec. Finals	4:21.7	Broad Jump					
Kerr (West York, Pa.)	State	4:22.4	Watkins (Jordan, Los Angeles, Calif.)	Marine League Finals	24-9%			
Wille (Columbus, Ohio)	State	4:23.0	Lindsay (Manual Arts, Los Angeles, Calif.)	Los Angeles City Meet	23-10%			
Newman (Jefferson, Los Angeles, Calif.)	City	4:23.8	Crump (Amarillo, Texas)	Red Raider Relays	23-7%			
Colwell (Lewis & Clark, Spokane, Wash.)	State	4:24.3	Stilwell (Lamar, Houston, Texas)	State	23-7%			
Winger (Oil City, Pa.)	State	4:25.0	Anderson (Muir, Pasadena, Calif.)	So. Sec. Semi-Finals	23-7			
Bowers (DeKalb, Ill.)	District	4:25.0	Coleman (Muir, Pasadena, Calif.)	Muir Decathlon	23-7			
120-Yard High Hurdles								
Thompson (Centennial, Compton, Calif.)	So. Sec. Finals	14.1	Washington (Jordan, Los Angeles, Calif.)	Decathlon City	23-7			
May (Blue Island, Ill.)	Mooseheart Relays	14.1	Carr (Lincoln, Tacoma, Wash.)	State	23-7			
Southern (Sunset, Dallas, Texas)	Dallas Inv.	14.1	Shot Put					
Andrews (Centennial, Compton, Calif.)	So. Sec. Finals	14.3	Ward (Santa Monica, Calif.)	State	59-4%			
Glass (Delano, Calif.)			Frye (Yakima, Wash.)	State	59-3%			
Crow (Corcoran, Calif.)			Robertson (Pacific, San Bernardino, Calif.)	State	59-1			
Cotterman (Lanier, Ohio)			Milleman (Fontana, Calif.)	State	58-9%			
Silvester (Bear River, Utah)			Marshall (St. Helens, Ore.)	State	58-3%			
Marshall (St. Helens, Ore.)			Carriott (Hobart, Ind.)	State	58-2%			
Vickers (Floydada, Texas)			Stewart (Galesburg, Ill.)	State	57-7			
Discus Throw								
Glass (Delano, Calif.)			Tulare Relays	175-8%				
Crow (Corcoran, Calif.)			Tulare Relays	175-4				
Cotterman (Lanier, Ohio)			Dayton Relays	179-10%				
Silvester (Bear River, Utah)			State	170-5%				
Vickers (Floydada, Texas)			Hale Center Relays	168-11%				

Compiled by E. A. THOMAS

Competitor and School	Meet	Distance	Competitor and School	Meet	Time
McLarry (North, Dallas, Texas)	State	167-6	El Camino, Calif.	California	1:29.9
Korgas (Weatherford, Texas)	Regional	167-0		Relays	
Scarborough (McDonald, Ohio)	State	166-10			
Javelin Throw			Mile Relay		
Enos (Montclair, N. J.)	State	211-7½	Robert E. Lee, Baytown, Texas	State	3:17.9
Barber (McPherson, Kans.)	State	190-0%	North Side, Fort Worth, Texas	Dallas Inv.	3:21.6
Francis (Medford, Ore.)	State	188-6½	Abernathy, Texas	State	3:23.0
Darnell (Mt. Pleasant, Utah)	State	185-4½	Abilene, Texas	Sandie Relays	3:23.6
Varga (Homestead, Pa.)	State	184-8½	Cardoza, Washington, D. C.	State	3:23.7
Morton (Walla Walla, Wash.)	State	184-0%	York, Elmhurst, Ill.	State	3:24.4
			East Technical, Cleveland, Ohio	Senate Championships	3:24.5
			Ada, Okla.	State	3:24.7
880-Yard Relay			440-Yard Relay		
Jefferson, Los Angeles, Calif.	State	1:27.2	Lamar, Houston, Texas	State	42.6
Polytechnic, Riverside, Calif.	So. Sec. Finals	1:28.2	Edison, Fresno, Calif.	Fresno Relay	
Jordan, Los Angeles, Calif.	State	1:28.3		Carnival	42.8
Technical, Oakland, Calif.	City	1:29.0	Fort Stockton, Texas	State	43.0
Centennial, Compton, Calif.	So. Sec. Finals	1:29.4	Baytown, Texas	Regional	43.0
Edison, Fresno, Calif.	Fresno Relay	1:29.5	Abilene, Texas	District	43.2
Blue Island, Ill.	Carnival	1:29.8	Marshalltown, Iowa	Drake Relays	43.4
	State		Breckenridge, Texas	Dallas Inv.	43.4

Tenth Annual High School Track Meet

THIS year marks the tenth annual National High School Track Meet. As in the case of all the preceding meets, the results of the various state high school track meets for the previous spring are compared and run as a national meet. The scoring follows the NCAA method of awarding 10, 8, 6, 4, 2, and 1 points for the first six places. The best time or distance is indicated by a solid red block. When two or more states tie for the best performance a diagonal block is used. New state records are indicated by stars, and the numbers in color in the parenthesis following the total number of points, indicate the position of the state.

Texas Wins Meet

For the second time in the ten years a state other than California has won the meet. Texas also turned the trick in 1949. This year's meet saw the addition of the mile relay as an event. Had this event not been counted, Texas would still have managed to nose out California by the slim margin of 3/4 of a point. In five of the previous meets the winner's point total was more than Texas' 84 1/4 points this year. The all-time high was California's 106 points last year. California scored 25 1/2 less points this year than last and Texas

increased its point total by 21 1/4 points over the preceding year.

Texas, in winning the meet, had the best performances in six of the events. However, in this regard California holds the record with the best performances for eight events. This mark was set in the 1951 meet. Last year California had the best performances in seven events and tied for the best time in an eighth event.

The Top Ten

There was very little change among the top ten. Eight of the states that were in the group last year repeated this year. New York, a third place finisher last year, and a member of the select group for six of the nine previous meets, scored only 1 point in this year's meet. Michigan dropped out of the group and the newcomers were Utah and Arizona. This year marked Utah's first appearance and Arizona's second appearance among the leaders. The old standbys, California and Texas, have been represented each year, while Ohio and Indiana have only missed once. Illinois has been listed eight times, and Pennsylvania seven times. This year marks Washington's fourth appearance and Kansas' third. For the second successive year New Jersey has just missed out — last year the margin

was 1 point and this year the margin was 3 1/2 points.

Kansas' third place finish is its highest to date. Last year Kansas finished sixth and placed seventh in the 1951 meet. In addition to the states mentioned, Iowa has been represented four times and Oregon three times; Massachusetts and Missouri twice; and Colorado, Connecticut, Florida, Louisiana, Tennessee, and Virginia once each. New Jersey has had recognition five times.

Because of varying weather and track conditions these meets must not be studied on a one-year basis. By comparing the present meet with previous meets it is possible to determine the relative strength of a state as far as high school track is concerned. The following table shows the total number of points earned over the ten years. In every instance fractions have been eliminated by raising the fraction to the next highest full point.

This year's meet saw the District of Columbia, North Carolina, and Maryland scoring points for the first time. Rhode Island and Delaware do not hold state meets and only Arkansas, Maine, Nevada, New Hampshire, South Carolina, and Vermont have now failed to score. In studying the accompanying table it is interesting to notice the frequency with which

(Write-up continued on page 36)

Meet Summary Appears on the Following Two Pages.

National High School Track Meet

STATE	120 HIGHS	100 DASH	MILE	880 RELAY	440	180 LOWS	880	220 DASH	MILE RELAY	POLE	SHOT	HIGH	DISCUS	BROAD	JAVELIN (b)	TOTAL
ALA.	15.3	10.0	4:34.5	50.3	20.3	2:04.4	22.3	3:30.4	12.0	52-0 $\frac{1}{2}$	5-10 $\frac{1}{4}$	142-11 $\frac{1}{2}$	22-7 $\frac{3}{8}$			
ARIZ.	14.7	10.2	4:27.5	★ 6 1:30.0	50.8	20.1	2:00.3	22.2		★ 51.3	6-3 $\frac{1}{4}$	★ 155-4 $\frac{1}{2}$	22-3 $\frac{1}{4}$		16 (10)	
ARK.	15.1	10.2	1:32.3	51.2	20.1	2:02.3	22.6	3:32.8	11-6 $\frac{1}{2}$	51.8	6-0	158-4	21-11			
CALIF.	14.3	10.0	★ 8 4:20.0	★ 10 48.7	8	19.2 4	1:57.0	21.6	13-4 8	★ 10 11-3 $\frac{1}{2}$		★ 160-7	23-3 $\frac{1}{2}$	6	73 $\frac{1}{2}$ (2)	
COLO.	14.9	10.2	4:36.4	1:32.7	50.5	20.2	2:00.5	22.1	3:29.3	12.5	50-0 $\frac{1}{4}$	6-3	155-7	21-10		
CONN.	15.5	10.0	4:31.2	1:33.4	★ 49.9	20.9	★ 1-56.5	22.1		11.3	★ 53.9	5-11 $\frac{1}{2}$	★ 153-3	21-1	165-1	6 (18)
DEL.	No state meet															
D.C.	15.8	9.9	4:36.6	★ 1:30.6	49.7	★ 20.5	2:02.8	22.6	★ 3:23.7	8	10-6	50-3 $\frac{1}{2}$	6-1	148-2	21-11 $\frac{1}{4}$	8 (14)
FLA.	15.6	10.1	★ 4:32.2	1:32.6	51.9	20.7	★ 2:01.4	22.6	★ 3:30.1	12.5	★ 52.2	6-1 $\frac{1}{2}$	146-11 $\frac{1}{2}$	21-7		
GA.	15.0	10.4	4:45.4	1:33.6	52.4	20.1	2:01.9	22.8		12-3 $\frac{1}{2}$	51-8 $\frac{1}{2}$	6-2 $\frac{1}{2}$	142-9	22-11 $\frac{1}{2}$	2 163-7	2 (24)
IDAHO	15.6	10.5	4:39.9	1:34.4	51.2	20.6	★ 1:59.2	23.5	★ 3:33.8	11-6 $\frac{3}{4}$	50-9 $\frac{1}{8}$	5-11 $\frac{1}{2}$	151-9 $\frac{1}{2}$	21-8 $\frac{1}{8}$		
ILL.	14.5 1/2/5	10.3	4:25.5	1:29.8	50.0	19 $\frac{1}{2}$	1:58.7	21.7	3:24.4	6	12-6	★ 57-0 $\frac{1}{2}$	1 6-2	161-1 2/10	22-4 $\frac{1}{8}$	19 9/10 (7)
IND.	★ 1 2/5	9.9	4:23.0	1:30.9	★ 49.1 5	★ 19.1 6	★ 1:56.6	21.9	3:25.1	1 12-6 $\frac{3}{4}$	★ 57.7 2	2 6-1 $\frac{1}{8}$		22-2 $\frac{3}{8}$		23 2/5 (5)
IOWA	15.5	10.1	4:32.0	1:32.6	51.3	20.3	2:03.0	22.1	3:31.1	12-4 $\frac{1}{2}$	56-3	6-1 $\frac{3}{4}$	147-1	22-10 $\frac{1}{8}$		1 (25)
KANS.	★ 14.4 6	★ 3 $\frac{1}{4}$	4:29.1	1:30.3	1	49.8	★ 1:59.7	★ 21.0 8	★ 3:25.4	12-6 $\frac{7}{8}$	53-4	6-3	160-1 $\frac{1}{4}$	22-1		
KY.	15.7	10.2	★ 4:34.9	1:33.1	52.5	20.7	2:02.4	22.2	★ 3:32.4	10-8	50-4 $\frac{1}{4}$	5-8	★ 49.11	21-9 $\frac{1}{4}$		
LA.	14.5 1/2/5	9	4:37.2	1:32.0	51.2	20.0	2:00.5	21.2	3:30.5	12-6	53-4 $\frac{1}{4}$	6-1	134-7 $\frac{3}{8}$	22-8	177-1 $\frac{1}{2}$	11 (11)
MAINE	16.9	10.6	4:41.2	1:42.3	52.4	21.8	2:02.3	23.9		10-9	46-8	5-6	154-0 $\frac{3}{4}$	20-3 $\frac{1}{4}$	160-1 $\frac{1}{2}$	15 2/5
MD.	★ 10.0	★ 4:35.9	★ 1:33.6	★ 51.2		★ 2:00.5	★ 21.2	★ 3:34.1	★ 11.6	48-5	★ 5-11 $\frac{1}{4}$	★ 140-6 $\frac{1}{4}$	★ 22-4 $\frac{1}{4}$	5 (22)		
MASS.	★ 14.9	10.0	4:34.6	1:31.8	51.0	20.0	2:01.8	21.8		11-2	50-0 $\frac{1}{4}$	6-2 $\frac{1}{8}$	145-1	21-3 $\frac{1}{4}$	164-11 $\frac{1}{8}$	
MICH.	★ 1 2/5	9 $\frac{3}{8}$	4:35.0	1:32.6	★ 49.7	19.5 $\frac{1}{2}$	2:00.0	21.4 $\frac{1}{2}$		12-4	53-0 $\frac{1}{2}$	6-3 $\frac{1}{2}$		22-5		7 3/20 (17)
MINN.	14.9	10.1	4:32.6	1:32.0	51.6	20.0	1:58.9	22.3	★ 12-4 $\frac{1}{8}$	55-5 $\frac{1}{2}$	5-11 $\frac{1}{4}$	1 160-8 $\frac{1}{4}$	21-1		1 (25)	
MISS.	14.9	10.1	4:45.3	1:32.4	51.1	20.5	2:06.5	22.7	3:30.3	12-4 $\frac{1}{4}$	52-6 $\frac{1}{2}$	6-1 $\frac{1}{4}$	146-9 $\frac{1}{2}$	21-8		
MO.	14.5 2 $\frac{1}{2}$ -8	9.9	★ 4:28.5	1:30.1	49.4 2	20.1	2:00.7	21.9	3:33.0	12-3 $\frac{3}{4}$	52-2 $\frac{1}{2}$	6-1 $\frac{1}{8}$	158-0	-22-7 $\frac{3}{8}$	6 (13)	
MONT.	15.8	10.1	4:41.7	1:33.8	51.9	20.5	2:02.1	21.9		11-6	50-3 $\frac{1}{2}$	5-9	145-0 $\frac{3}{4}$	22-8 $\frac{1}{8}$	173-6	

MINN.	14.9	10.1	4:32.6	1:32.0	51.6	20.0	1:58.9	22.3	12:4 $\frac{1}{2}$	55:5 $\frac{1}{2}$	5-11 $\frac{1}{4}$	160-8 $\frac{1}{4}$	21-1	1 (25)
MISS.	14.9	10.1	4:45.3	1:32.4	51.1	20.5	2:06.5	22.7	3:30.3	12-4 $\frac{1}{4}$	52:6 $\frac{1}{2}$	6-1 $\frac{1}{4}$	146-9 $\frac{1}{2}$	21-3
MO.	14.6	9.9	4:45.3 ^{4:42.5}	1:30.1 ^{1:30.1}	49.4 ^{49.4}	20.1	2:06.7	21.9	3:33.0	12-3 $\frac{1}{4}$	52:2 $\frac{1}{2}$	6-1 $\frac{1}{8}$	156-0	-22-7 $\frac{1}{2}$
MONT.	15.8	10.1	4:41.7	1:33.8	51.9	20.5	2:02.1	21.9		11-6	50-3 $\frac{1}{2}$	5-9	145-0 $\frac{1}{4}$	22-8 $\frac{1}{2}$
NEBR.	15.0	10.1	4:32.1	1:32.3	51.8	20.5	2:01.6	22.4	3:25.5	12-2 $\frac{1}{4}$	★ 55-5	★ 6-5 $\frac{1}{2}$ 6	147-3 $\frac{1}{4}$	22-0 $\frac{3}{8}$
NEV.	★ 14.8	10.1	4:51.1	1:35.4	52.2	19.9	2:10.7	23.6		11-3	48-3 $\frac{1}{8}$	★ 6-1 $\frac{1}{4}$	139-9 $\frac{1}{8}$	21-0 $\frac{3}{8}$
N.H.	16.3	10.4	★ 4:32.5	1:36.3	51.8	21.6	2:04.9	23.5		10-10	★ 52-10 $\frac{1}{4}$	5-7	★ 141-2 $\frac{1}{2}$	20-10 $\frac{3}{8}$
N.J.	14.6	10.0	★ 4:10.5	1	49.5	19.6	1 $\frac{1}{2}$	21.6		12-0	54-5	6-2 $\frac{1}{4}$	149-0 $\frac{1}{8}$	21-11 $\frac{1}{4}$
N. MEX.	15.1	10.0	4:38.9	1:32.3	50.6	20.2	2:03.4	22.1	3:29.7	12-1 $\frac{1}{2}$	49-4	6-4 $\frac{3}{8}$ 2	159-4	23-0 $\frac{7}{8}$
N.Y.	10.1	4:26.0	1:31.2	50.0	20.0	1:58.3	22.2	3:42.1	12-1 $\frac{1}{2}$	56-11 $\frac{1}{2}$	★ 6-4 $\frac{1}{4}$	158-4 $\frac{1}{4}$	★ 22-9 $\frac{1}{4}$	170-10 $\frac{7}{8}$
N.C.	15.2	10.2	4:41.1		52.0	20.7	★ 1:56.2	22.8	3:32.2	11-8	48-1 $\frac{1}{2}$	★ 6-0 $\frac{3}{8}$	143-11 $\frac{1}{2}$	21-11
N.D.	15.0	9.7	4:44.3	1:39.5	52.1	20.0	2:12.5	21.5		10-6	46-10	5-11 $\frac{1}{4}$	129-3 $\frac{3}{4}$	19-5 $\frac{1}{2}$
OHIO	1.2/5 14.5	3 $\frac{1}{4}$ 9.8	4:33.3	1:31.0	50.0	1 19.3 2	2:02.4	22.1	3:25.8	13-1 6	55-8 $\frac{3}{4}$	6-2	★ 166-10	22-4 $\frac{1}{2}$
OKLA.	14.8	10.3	4:35.8	1:30.5	50.3	19.7	2:00.0	22.2	★ 3:24.7 4	12-3	55-0	6-1 $\frac{1}{8}$	154-6 $\frac{1}{2}$	21-9 $\frac{1}{2}$
ORE.	15.1	10.3	4:28.1	1:31.6	50.8	★ 20.7	★ 1:58.0	22.4		12-6	58-2 $\frac{1}{4}$	4	5-11 $\frac{3}{8}$	164-6 $\frac{1}{2}$
PA.	14.9	10.1	★ 4:22.4	1:31.0	49.1	19.8	1:58.1	21.6	★ 3:24.9 2	12-6	50-11 $\frac{1}{4}$	★ 6-5 $\frac{3}{4}$ 8	152-1 $\frac{3}{4}$	21-11 $\frac{1}{2}$
R.I.	No state meet													
S.C.	15.5	10.2	4:53.5	1:34.4	51.0	21.0	2:03.8	22.6	3:35.9	11-4	49-4 $\frac{1}{4}$	5-8 $\frac{1}{4}$	139-2	20-11
S.D.	★ 14.7	10.2	★ 4:30.4	1:33.4	50.9	20.1	2:03.0	★ 22.3	3:33.5	11-4	★ 51-9 $\frac{1}{8}$	5-11	148-8 $\frac{1}{2}$	21-4
TENN.	15.9	10.5	4:38.9	1:35.0	51.1	★ 20.2	2:04.2	22.7	3:39.0	11-9 $\frac{1}{4}$	49-9 $\frac{1}{2}$	5-10 $\frac{1}{2}$	★ 157-1	21-5 $\frac{1}{2}$
TEXAS	3 $\frac{1}{4}$ 9.8	4:27.5	★ 18.8	8			★ 1:58.0	23.2	12-10 $\frac{1}{2}$	56-8	6-5	4	134-11 $\frac{1}{2}$	167-6 $\frac{3}{4}$
UTAH	15.0	10.2	4:44.9	1:32.8	51.5	20.1	2:01.7	22.1	3:31.7	12-11 $\frac{2}{3}$	58-3 $\frac{1}{8}$	6-1	171-1 $\frac{1}{2}$	21-11
VT.	16.0	11.0	4:37.7		52.0	21.3	2:07.2	23.2		10-6	46-6 $\frac{1}{2}$	5-4	134-11 $\frac{1}{2}$	19-3
VA.	14.8	10.3	4:37.1	1:38.6	50.7	★ 19.7	2:01.8	22.2	3:32.5	11-10	★ 56-6	6-0 $\frac{1}{8}$	149-1	22-3 $\frac{1}{2}$
WASH.	15.1	10.0	★ 4:24.3	2	50.1	19.8	1:59.2	22.1	★ 13-0	★ 59-3 $\frac{1}{2}$	8	6-2	160-1 $\frac{1}{4}$	23-7 $\frac{1}{2}$
W. VA.	16.0	10.6	4:49.2	1:32.5	54.1	21.6	2:07.0	23.7	3:36.7	11-0	51-3 $\frac{1}{2}$	5-2	146-9	20-0 $\frac{1}{2}$
WISC.	15.1	10.3	4:44.1	1:33.8	52.1	23.5	2:02.1	22.7		12-0	49-6 $\frac{1}{4}$	6-0	146-1 $\frac{1}{2}$	21-9
WYO.	★ 14.6	10.1	4:53.7	1:34.5	50.6	21.2	2:06.6	22.8		11-10 $\frac{1}{2}$	★ 52-1 $\frac{3}{4}$	6-1 $\frac{1}{2}$	152-6 $\frac{1}{4}$	21-3

(n) Wisconsin runs the 200-yard low hurdles

(b) No points awarded for javelin because less than half the states have this event.

National High School Track Meet

STATE	120 HIGHS	100 DASH	MILE	880 RELAY	440	180 LOWS	880	220 DASH	MILE RELAY	POLE	SHOT	HIGH	DISCUS	BROAD	JAVELIN (b)	TOTAL
ALA.	15.3	10.0	4:34.5	50.3	20.3	2:04.4	22.3	3:30.4	12.0	52-0 ^{7/8}	5-10 ^{1/4}	142-11 ^{1/2}	22-7 ^{1/2}			
ARIZ.	14.7	10.2	4:27.5	★ 6 1:30.0	50.8	20.1	2:00.3	22.2		★ 12-10 12-10	51-3	6-3 ^{1/4}	★ 155-4 ^{1/2}	22-3 ^{1/4}	16 (10)	
ARK.	15.1	10.2		1:32.3	51.2	20.1	2:02.3	22.6	3:32.8	11-6 ^{1/2}	51-8	6-0	158-4	21-11		
CALIF.	14.3	10.0	★ 8 4:20.0	★ 31 1:31.5	48.7	8	19.2 4	1:57.0	21.6		13-4 8 13-4 8	★ 10 10	160-7	23-3 ^{1/2}	73 ^{1/2} (2)	
COLO.	14.9	10.2	4:36.4	1:32.7	50.5	20.2	2:00.5	22.1	3:29.3	12.5	50-0 ^{1/4}	6-3	155-7	21-10		
CONN.	15.5	10.0	4:31.2	1:33.4	49.9	20.9	★ 1:56.5	22.1		11-3	★ 53.9	5-11 ^{1/2}	★ 133-3	21-1	165-1	6 (18)
DEL.	No state meet															
D.C.	15.8	9.9	4:36.6	★ 1:30.6	49.7	★ 20.5	2:02.8	22.6	★ 3:23.7	8	10-6	50-3 ^{1/2}	6-1	148-2	21-11 ^{1/4}	8 (14)
FLA.	15.6	10.1	★ 4:32.2	1:32.6	51.9	20.7	★ 2:01.4	22.6	★ 3:30.1	12-5	★ 52.2	6-1 ^{1/2}	146-11 ^{1/2}	21-7		
GA.	15.0	10.4	4:45.4	1:33.6	52.4	20.1	2:01.9	22.8		12-3 ^{1/2}	51-8 ^{1/2}	6-2 ^{1/2}	142-9	22-11 ^{1/2}	163-7	2 (24)
IDAHO	15.6	10.5	4:39.9	1:34.4	51.2	20.6	★ 1:59.2	23.5	★ 3:33.8	11-6 ^{3/4}	50-9 ^{7/8}	5-11 ^{1/2}	151-9 ^{1/2}	21-8 ^{1/8}		
ILL.	1 2/5	10.3	4:25.5	1:29.5	50.0	19 ^{1/2} 5	1:58.7	21.7	3:24.4	6	12-6	★ 57-0 ^{1/2}	6-2	161-1 1/10	22-4 ^{7/8}	199 ^{10/11} (7)
IND.	★ 1 2/5	9.9	4:23.0	1:30.9	★ 49.1 5	★ 19.1 6	★ 1:56.6	21.9	3:25.1	1	12-6 ^{3/4}	★ 57-7 2	6-1 ^{1/2}			22-2 ^{3/8} (5)
IOWA	15.5	10.1	4:32.0	1:32.6	51.3	20.3	2:03.0	22.1	3:31.1	12-4 ^{1/2}	56-3	6-1 ^{1/4}	147-1	22-10 ^{1/8}	1 (25)	
KANS.	★ 14.4	6	★ 3 ^{3/4}	4:29.1	1:30.3 1	49.8	★ 1:59.7	★ 21.0 8	★ 3:25.4	12-6 ^{7/8}	53-4	6-3	160-1 ^{1/4}	22-1		
KY.	15.7	10.2	4:34.9	1:33.1	52.5	20.7	2:02.4	22.2	★ 3:32.4	10-8	50-4 ^{1/4}	5-8	★ 49.11	21-9 ^{1/4}		
LA.	1 2/5	9.8	4:37.2	1:32.0	51.2	20.0	2:00.5	21.2	3:30.5	12-6	53-4 ^{3/4}	6-1	134-7 ^{3/8}	22-8	177-1 ^{1/2}	15 2/5 (11)
MAINE	16.9	10.6	4:41.2	1:42.3	52.4	21.8	2:02.3	23.9		10-9	46-8	5-6	154-0 ^{3/4}	20-3 ^{1/4}	160-1 ^{1/2}	
MD.	★ 10.0	★ 4:35.9	★ 1:33.6	★ 51.2		★ 2:00.5	★ 21.2	★ 3:34.1	★ 11-6	48-5	★ 5-11 ^{1/4}	★ 140-6 ^{1/4}	★ 22-4 ^{1/4}	5 (22)		
MASS.	★ 14.9	10.0	4:34.6	1:31.8	51.0	20.0	2:01.8	21.8		11-2	50-0 ^{3/4}	6-2 ^{1/8}	145-1	21-3 ^{1/8}	164-11 ^{1/8}	
MICH.	★ 1 2/5	3 ^{1/4} 9.8	4:35.0	1:32.6	★ 49.7	19.5 1/2	2:00.0	21.4 2		12-4	53-0 ^{1/2}	6-3 ^{1/2}	1	160-8 ^{1/4}	21-1	1 (25)
MINN.	14.9	10.1	4:32.6	1:32.0	51.6	20.0	1:58.9	22.3	★ 12-4 ^{7/8}	55-5 ^{1/2}	5-11 ^{3/4}			22-5	7 3/20 (17)	
MISS.	14.9	10.1	4:45.3	1:32.4	51.1	20.5	2:06.5	22.7	3:30.3	12-4 ^{3/4}	52-6 ^{1/2}	6-1 ^{1/4}	146-9 ^{1/2}	21-3		
MONT.	15.8	10.1	4:41.7	1:33.8	51.9	20.5	2:02.1	21.9		11-6	50-3 ^{1/2}	5-7 ^{1/8}	156-0	22-7 ^{3/8}	6 (13)	

MICH.	14.9	10.1	4:32.6	1:32.0	51.6	20.0	1:58.9	22.3	12:4 $\frac{1}{8}$	30:3 $\frac{1}{2}$	3:11 $\frac{1}{4}$	160-8 $\frac{1}{4}$	21-3	(2.5)
MILW.	14.9	10.1	4:45.3	1:32.4	51.1	20.5	2:06.5	22.7	3:30.3	12:4 $\frac{1}{4}$	52:6 $\frac{1}{2}$	6-1 $\frac{1}{4}$	146-9 $\frac{1}{2}$	21-3
MO.	14.8	9.9	4:42.8	1:32.5	50.4	20.1	2:00.7	21.9	3:33.0	12:3 $\frac{1}{4}$	52:2 $\frac{1}{2}$	6-1 $\frac{1}{2}$	156-5	-22-7 $\frac{1}{2}$
MONT.	15.8	10.1	4:41.7	1:33.8	51.9	20.5	2:02.1	21.9	11.6	50:3 $\frac{1}{2}$	5-9	145-0 $\frac{1}{4}$	22-8 $\frac{1}{2}$	173-6
NEBR.	15.0	10.1	4:32.1	1:32.3	51.8	20.5	2:01.6	22.4	3:25.5	12:2 $\frac{1}{4}$	★ 55-5	★ 6-5 $\frac{1}{2}$	147-3 $\frac{1}{4}$	22-0 $\frac{1}{2}$
NEV.	* 14.8	10.1	4:51.1	1:35.4	52.2	19.9	2:10.7	23.6	11.3	48:3 $\frac{1}{8}$	★ 6-1 $\frac{1}{4}$	139-9 $\frac{1}{2}$	21-0 $\frac{1}{8}$	6 (16)
N.H.	16.3	10.4	* 4:32.5	1:36.3	51.8	21.6	2:04.9	23.5	10-10	★ 52-10 $\frac{1}{4}$	5-7	* 141-2 $\frac{1}{2}$	20-10 $\frac{1}{2}$	169-3 1/3
N.J.	14.6	10.0	4:10.0	1:19.5	49.5	1	19.6	21.6	12-0	54-5	6-2 $\frac{1}{4}$	149-0 $\frac{1}{2}$	21-11 $\frac{1}{2}$	211-7 $\frac{1}{2}$
N. MEX.	15.1	10.0	4:38.9	1:32.3	50.6	20.2	2:03.4	22.1	3:29.7	12:1 $\frac{1}{2}$	49-4	6-4 $\frac{1}{2}$	159-4	23-0 $\frac{1}{2}$
N.Y.	10.1	4:26.0	1:31.2	50.0	20.0	1:58.3	22.2	3:42.1	12:1 $\frac{1}{2}$	56-11 $\frac{1}{2}$	★ 6-4 $\frac{1}{4}$	158-4 $\frac{1}{4}$	★ 22-9 $\frac{1}{4}$	175-10
N.C.	15.2	10.2	4:41.1		52.0	20.7	★ 1:56.2	22.8	3:32.2	11-8	48:1 $\frac{1}{2}$	★ 6-0 $\frac{1}{2}$	143-11 $\frac{1}{2}$	21-11
N.D.	15.0	4:44.3	1:39.5	52.1	20.0	2:12.5	21.5	1	10-6	46-10	5-11 $\frac{1}{4}$	129-3 $\frac{1}{4}$	19-5 $\frac{1}{2}$	145-7
OHIO	12 $\frac{1}{2}$ 5	3 $\frac{1}{4}$	4:33.3	1:31.0	50.0	1	19.3	2	2:02.4	22.1	3:25.8	13-1	6	22-4 $\frac{1}{2}$
OKLA.	14.8	10.3	4:35.8	1:30.5	50.3	19.7	2:00.0	22.2	★ 3:24.7	12-3	55-0	6-1 $\frac{1}{2}$	154-6 $\frac{1}{2}$	21-9 $\frac{1}{2}$
ORE.	15.1	10.3	4:28.1	1:31.6	50.8	★ 20.7	★ 1:58.0	22.4	12-6	58:2 $\frac{1}{4}$	4	164-6 $\frac{4}{3}$	21-10 $\frac{3}{4}$	188-6 $\frac{1}{4}$
PA.	14.9	10.1	★ 6	1:31.0	49.1	5	19.8	21.6	★ 3:24.9	12-6	50-11 $\frac{1}{4}$	★ 6-5 $\frac{1}{2}$	152-13 $\frac{1}{2}$	21-11 $\frac{1}{2}$
R.I.	No state meet													
S.C.	15.5	10.2	4:53.5	1:34.4	51.0	21.0	2:03.8	22.6	3:35.9	11-4	49-4 $\frac{1}{4}$	5-8 $\frac{1}{4}$	139.2	20-11
S.D.	* 14.7	10.2	* 4:30.4	1:33.4	50.9	20.1	2:03.0	22.3	3:33.5	11-4	★ 51-9 $\frac{1}{8}$	5-11	148-8 $\frac{1}{2}$	21-4
TENN.	15.9	10.5	4:38.9	1:35.0	51.1	★ 20.2	2:04.2	22.7	3:39.0	11-9 $\frac{3}{4}$	49-9 $\frac{1}{2}$	5-10 $\frac{1}{2}$	157-1	21-5 $\frac{1}{8}$
TEXAS	3 $\frac{1}{4}$	9.8	4:27.5	8	18.8				12:10 $\frac{1}{2}$	1	56-8	4	167-6	84 $\frac{1}{4}$ (1)
UTAH	15.0	10.2	4:44.9	1:32.8	51.5	20.1	2:01.7	22.1	3:31.7	12-11 $\frac{2}{3}$	6-1		21-11	185-4 $\frac{1}{8}$
VT.	16.0	11.0	4:37.7		52.0	21.3	2:07.2	23.2	10-6	46-6 $\frac{1}{2}$	5-4	134-11 $\frac{1}{2}$	19-3	166-8 $\frac{1}{2}$
VA.	14.8	10.3	4:37.1	1:38.6	50.7	19.7	2:01.8	22.2	3:32.5	11-10	★ 56-6	6-0 $\frac{1}{8}$	149-1	22-3
WASH.	15.1	10.0	★ 2	1:30.2	50.1	19.8	1:59.2	22.1		★ 13-4	★ 8	59-3 $\frac{1}{2}$	6-2	160-1 $\frac{1}{4}$
WISC.	15.1	10.3	4:44.1	1:33.8	52.1	23.5	(a) 2:02.1	22.7	3:36.7	11-0	51-3 $\frac{1}{2}$	5-2	146-9	20-0 $\frac{1}{2}$
WYO.	* 14.6	10.1	4:53.7	1:34.5	50.6	21.2	2:06.6	22.8	11-10 $\frac{1}{8}$	★ 52-1 $\frac{1}{4}$	6-1 $\frac{1}{2}$	152-6 $\frac{3}{4}$	21-3	

(a) Wisconsin runs the 200-yard low hurdles

(b) No points awarded for javelin because less than half the states have this event.

as	803	22. Va.	40
lio	462	23. Utah	36
ill.	287	24. Nebr.	34
Ind.	267	25. Fla.	29
6. N. Y.	255	26. Minn.	29
7. N. J.	219	27. Mont.	19
8. Penn.	183	28. N. Dak.	18 1/2
9. Iowa	153	29. Idaho	15
10. Okla.	145	Tenn.	15
11. Kans.	137	31. N. Mex.	12
12. Wash.	112	32. D. C.	8
13. Ore.	105	Ky.	8
14. Wisc.	95	N. C.	8
15. Mo.	84	35. Md.	5
16. Mass.	82	S. Dak.	5
17. Colo.	77	W. Va.	5
18. Ariz.	74	38. Ga.	4
19. Mich.	70	39. Ala.	1 1/2
20. La.	56	40. Miss.	1
21. Conn.	55	41. Wyo.	1/3
	46		4

states of an area fall together in the standings. As an illustration, three Middle Western states — Ohio, Illinois, and Indiana hold positions 3, 4, and 5, while the three Middle Atlantic states — New York, New Jersey, and Pennsylvania hold the next three positions. Iowa, Oklahoma and Kansas follow in order and then come the two Pacific Northwest states of Washington and Oregon. Minnesota, Montana, North Dakota, and Idaho form a group of states along the Canadian border and they will be found grouped together in the standings. Three of the states which have failed to score are the three northern New England states of Vermont, New Hampshire, and Maine. The only change among the first ten saw Pennsylvania taking eighth place ahead of Iowa and Oklahoma. Among the second ten, Kansas is continuing to move up fast. Last year, Kansas jumped from sixteenth to thirteenth place and this year took over the eleventh spot. Louisiana has also moved up fast to take over the twentieth position. The nod for the greatest improvement goes to Utah on moving up four spaces from twenty-seventh to twenty-third place. Outside of the change caused by the addition of newcomers, District of Columbia, North Carolina, and Maryland there was very little additional change among the last fifteen states.

In the past several years New York made big strides in attempting to overtake fifth place Indiana. Last year the margin was reduced to only 13 points. However, by only registering 1 point this year, the eastern state lost considerable ground. From the very first meet Indiana and Illinois have staged a real battle. Indiana led by 10 points after the first meet and Illinois cut the margin to 3 points the next year. In the third meet Indiana pulled away to a 33-point lead and added an additional 5 points to

its margin the next year. In the sixth meet Illinois scored heavily to reduce the margin to a mere 3 points. The next year Illinois took over the lead by 25 points, and the following year saw the lead cut to 5 points. In the 1951 meet neither state scored many points, but Indiana managed to take over the lead by 1 point. Last year Illinois moved ahead of Indiana by 16 points, and this year Indiana reduced the margin to 12 points.

Iowa has only averaged 5 1/2 points in the preceding three meets and this year's meet. Whereas at one point the state ranked a strong sixth, it is now in ninth place and being threatened by Oklahoma. At the conclusion of the first five meets Wisconsin was in eighth place. However, in the past five meets the Badger state has only picked up 9 points and holds a very precarious fourteenth position. When the current standings are compared with the standings at the end of the first five meets, it will be noted that Arizona has shown the greatest improvement, going from a weak twenty-fourth position to a very strong eighteenth position. In the first five meets Arizona scored 14 points and has registered a total of 56 points in the last five meets. Louisiana has also shown remarkable improvement, going from twenty-fifth to twentieth position. Its point total for the first five meets was 9 points and it has averaged a fraction better than that in each of the succeeding five meets. Idaho has not registered a point in the last five meets and its standing has shown the biggest drop, going seven places from twenty-second to twenty-ninth place.

Five years ago Oregon held thirteenth place with 50 points and had a mere 2-point spread over, at that time, fourteenth place Oklahoma. Oregon was only 3 points out of twelfth place. During the first five meets Oregon averaged 10 points per meet. With the current meet figured into the standings, Oregon holds the same position (thirteenth) and picked up 45 points in the last five meets for a 9-point average. Its margin of point differences for the next spot above and below has been increased to 10 and 11 points respectively. Therefore, it would seem that if one of the first fifteen states were to improve its relative position over the next five years it would have to average better than 10 points a meet.

Pacific States Lead

For the preceding nine years it has been customary to group the states in the nine generally accepted sec-

	'47-'51	'52-'56	1956
Pacific	30.8	36.5	35.6
W. So. Central	14.9	26.2	25.8
E. No. Central	24.5	13.7	13.8
Mid. Atl.	15.6	19.7	11.5
W. No. Central	6.5	5.3	7.5
Mountain	2.7	3.0	5.0
South Atl.	1.5	1.4	2.8
New England	3.4	2.6	1.2
E. So. Central	0.7	0.8	0.0

tions of the country and then to strike averages. In each of the preceding meets the region comprising the Pacific States has won by a substantial margin.

This is due not only to the tremendous showing each year of California, but it reflects the better-than-average strength of both Washington and Oregon. The accompanying table shows the sectional averages for the first five-year period, the second five-year period, and for this meet by itself. Incidentally, the current meet is also figured in the second five-year period.

Very noticeable is the decided shift in power away from the East North Central section. The Pacific states, Middle Atlantic, and West South Central states picked up the points that were dropped by Ohio, Michigan, Indiana, Illinois, and Wisconsin. There was appreciably little change among the other five sections.

The table also clearly shows the great concentration of track power among the fifteen states comprising the first four sections named. In the first five years of the meet 86 per cent of the points were scored by these states. The last five years showed these states garnering 88 per cent of the points and the current meet shows them dropping slightly to a figure representing a little more than 84 1/2 per cent of the total.

These fifteen states include, in addition to those holding the first eight places in the total standings, Oklahoma in tenth, Washington in twelfth place, Oregon in thirteenth, Wisconsin in fourteenth, Michigan in nineteenth, Louisiana in the twentieth position, and Arkansas which has failed to score.

This meet was the greatest in history from the standpoint of the number of records broken. Ninety-one stars are shown on the chart. The previous high was 73 in the 1954 meet. Maryland smashed all previous records in eleven events to set a new mark in this regard. This makes a total of sixteen new state records for Maryland during the ten-year period. New Mexico failed to break a record in this meet, but had broken 21 in the previous nine meets, and heads in this department.

(Continued on page 58)



Architect, McGuire and Shook, Indianapolis

A lively, resilient floor at Columbus, Ind., High School permits fast action, safe play on the court!

ACTION is the word for Seal-O-San! For there lies the difference between an ordinary sealer and the right sealer for your gym floor.

All gym floors must be designed for **ACTION** . . . and the activities on those floors should be safe for the youngsters. Basketball is among the fastest sports played on the gym floor and to be played well the players must have confidence that pivots, fast breaks and all tricky footwork are safe, steady, sure . . . otherwise well organized team play becomes pure chaos with each team member looking out for his own skin.

FOUND SEAL-O-SAN BEST IN 17 YEARS' EXPERIENCE

"For the past 17 years I have been connected with or associated with school business in Indiana either as a coach or as a Superintendent of Maintenance and Supplies and I would like to say that during that time I have used several types of gym finishes. I am convinced that the Seal-O-San gym finish is one of the better if not the best gym finishes I have used. It is very easily maintained plus the fact that it is non-slippery and glare free."

Carl Buffenbarger

Superintendent of Main-



This is **SEAL-O-SAN** ® in action!

After a season on the new floor, Carl Buffenbarger, Superintendent of Maintenance, reports the Seal-O-San finish has performed satisfactorily in every way. Columbus High School's basketball team found the floor to its liking and showed its approval by winning every game it has played on the floor.

All modern sealers provide a surface that is relatively easy to maintain. All to a degree, enhance the beauty of the wood. All are sold on performance. But, *only* Seal-O-San can give you the assurance of a really lively, yet safe floor for all types of fast action under nearly any condition.

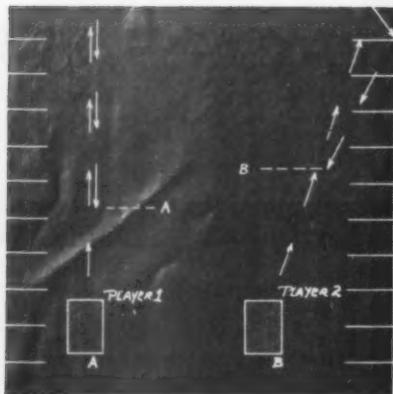
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A question golf coaches and teachers have struggled over for years is what to do about golf in the winter time. How can the interest that was created during the spring be nurtured during that time of the year when most golf courses are closed? Of equal importance is the question whether many of the golf skills can be taught satisfactorily in the school gymnasium.

We have been wrestling with this problem for several years. After much study and experimentation, including the construction of several teaching devices, the conclusion was reached that most of the situations a player is called upon to face on a golf course can be approximated indoors.

To begin, it is possible to teach all phases of the game in a relatively small indoor area if a little ingenuity is used. Instructional opportunities for teaching the drive, the fairway shots with the woods and irons, chipping, pitching, and putting should be included. The only shot that offers some difficulty is the one out of the sand trap.

Since the indoor area is presumed to be fairly small, the necessary equipment should be selected accordingly. For instance, a plastic or cotton type ball should be used to prevent damage to property and injury to students. To teach the drive, rubber tees of the type used on driving ranges may be used. A thin mat of hard rubber makes an excellent driving surface and preserves the floor. There is a type of rubber mat which is used in pool and shower areas that has holes about one-half inch in diameter throughout. Rubber tees can be inserted from the under surface of the mat. Thus, the player does not have to waste time retrieving the tees, and there is no apprehension that others may be struck by tees that have been driven out by the players.

Most of the other shots can be executed by utilizing a door mat. The type required is one that has a high pile. By using this type of mat, the conditions found on the fairway for playing the two, three, and four woods and all of the irons are approximated.

A runner of cocoa matting may be used for practicing putting. In this case the coarse fibers tend to slow the ball down and make the action comparable to that found on a putting green. If an old piece of carpeting or rug is available, it will also serve the purpose. We constructed a frame about 15 feet long and 3 feet wide. To this frame we tacked a piece of

ally confuse the player and often produce worse, rather than better, results. However, the main concern of the coach is to keep the interest of his squad high during the off-season so that the team members will want to come out for practice regularly.

One of the best methods of creating and maintaining interest is to introduce scoring devices. These devices are not only helpful to the teacher in marking and grading his students, but they also present a continuous challenge to the members of the class and to the team. Handled properly, they tend to keep interest high. Their value to the class is enhanced by giving

Indoor Golf

By ANTHONY E. ORLANDO
Golf Coach, City College of New York

cotton rug that had a fairly long pile. Near the end of this contrivance a hole was cut the size of a regulation cup. This putting green has proved very satisfactory.

By using this inexpensive equipment, it is possible to work on most of the golf skills. It was found that 18 students could be accommodated in a room 30 by 50 feet, if they worked in pairs. However, one standing rule was adopted, namely, that the players line up along both long walls and swing toward the near wall at all times. There have been no accidents for the four years since this type of instruction was instituted even though, on several occasions, a club has slipped from a student's hand. The only damage done was to the club as it struck the wall.

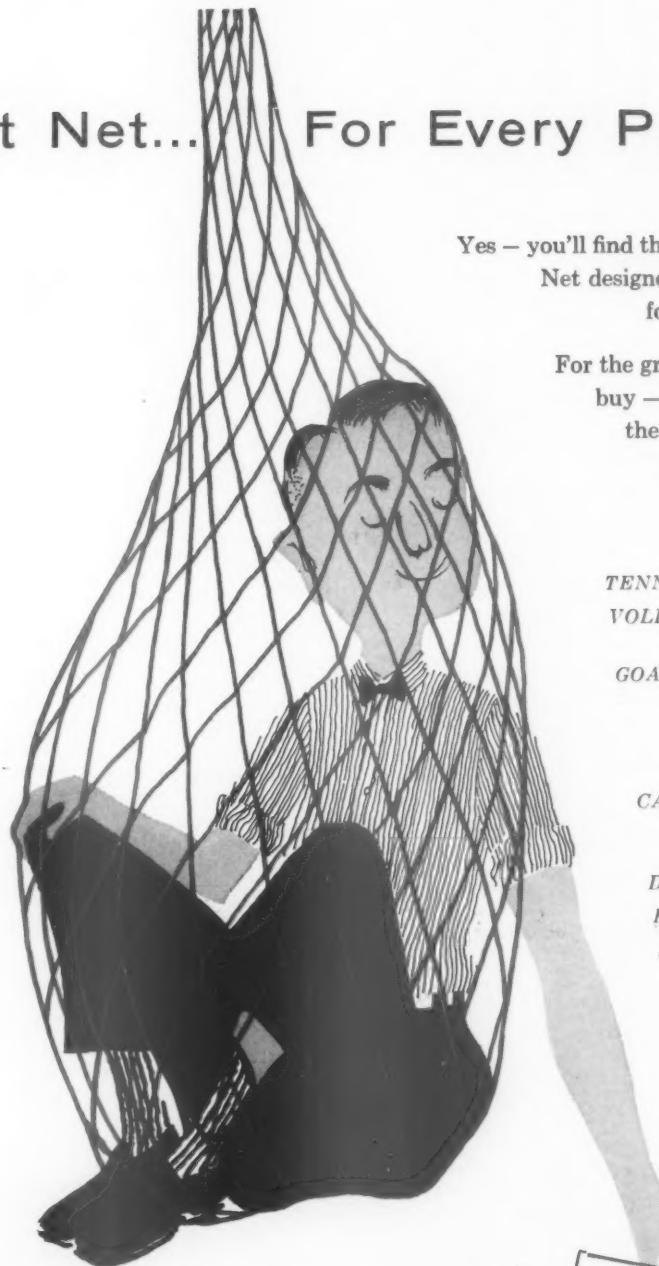
Both the coach and the teacher can make use of this equipment in their teaching. However, the mere teaching opportunity alone is not sufficient. The average teacher should have a means of testing his students. On the other hand, the coach is handling a more advanced group and his problem during the winter is slightly different. To be sure, he will want to do a certain amount of teaching. Moreover, during this time of year he can screen the candidates. The coach can also use this off-season time to make drastic changes in the swing of those players whom he thinks may profit by such changes. These changes, if made during the regular season, usu-

ing the students a series of goals at which to shoot. Scoring devices also serve a dual purpose for the team members and the coach. First of all, the team member can compete against himself day after day. In this way, if only one player is present, the coach can keep him on his toes. Second, if the coach utilizes his scoring properly, he can arrange individual and team matches that may continue week after week throughout the entire winter. These matches will help keep the entire squad interested during this supposedly dull period.

Each type of shot lends itself to scoring possibilities. For example, the drive can be scored for distance or accuracy. If distance is to be judged, a series of lines parallel to the tee can be marked off and a range of scores from 0 to 10 can be allocated, depending on the distance from the tee to the spot where the ball comes to a stop. Only if the room is quite long can a direct measurement be indicated. Usually, the ball rebounds off the front wall and the total distance, including the rebound, should be taken into account. If the ball bounces back and forth against more than one wall, the total of the perpendicular distances should be considered. The reason that the distances are marked off parallel to the tee is to penalize the player whose shot is off line and to reward a straight shot.

Diagram 1 shows the drives of two players. In the case of player No. 1,

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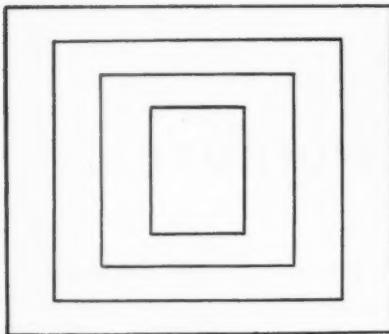


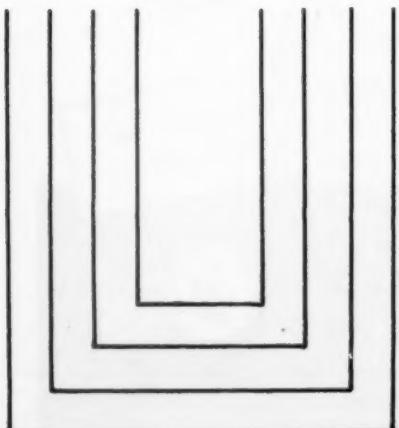
Diagram 2

his shot was fairly straight and he obtained good distance. Player No. 2 pushed his shot to the right and lost distance because of poor direction. Both shots traveled approximately the same distance, but player No. 1 received credit for a longer drive as shown by the lines which are drawn parallel to the tee. The arrows indicate the direction in which the two drives traveled, while the letters indicate the rebound from each wall.

Scoring the accuracy of a drive can be done in a different manner. A player can drive against a wall target that is either hung, for instance, one made of canvas or heavy paper, or one chalked or painted directly on the wall. Since the excellence of a drive is determined not only by its direction but by its proper trajectory, both vertical and horizontal limits must be indicated (Diagram 2). In mapping out the limits of the scoring zone, a certain amount of judgment should be used to take into account the distance from the tee to the target.

The target shown in Diagram 2 can also be used with the two, three, and four woods. If the target is on canvas or heavy paper, it can be raised somewhat with each club to take into account the greater height that should

Diagram 3



result due to the increased angle of the clubface as the higher numbered woods are used. Should the target be painted directly on the wall it can still be used, only the player should tee off somewhat closer when he changes clubs to make up for the increase in the loft of the club.

Similar targets can also be designed for use when hitting with the full irons. If desired, a contest for distance can easily be arranged by using the floor markings for the drive, and making the necessary adjustments in the scoring zones because of the lesser distance obtained with the irons. However, the main emphasis with the irons is usually placed on directional accuracy. Consequently, a slight modification should be made in the wall target as indicated in Diagram 3. It is best to use the removable type of target since the two targets may serve the purpose for all of the irons, one for the irons through No. 5, and another for the No. 6 through No. 9 irons, or the sand wedge.

Because height is essential in iron play, the upper margin of each scoring zone has been left open purposely. Thus, any shot which lands vertically above any scoring zone can be construed as landing in it. Also, because height is so important when hitting with the higher numbered irons, the lower limits of the target should be raised accordingly. Raising of the target is possible with the detachable type of wall target. If the target is attached permanently to the wall, the player will have to tee off closer and closer to the wall as the higher numbered irons are used. Thus, disadvantages of the permanently attached type of target can easily be seen.

A simple target for use with the pitch shot can be constructed if a volleyball or badminton net is utilized. As the name indicates, this shot must rise sharply and drop on to a floor target in much the same manner as the approach shot does to the green. Of course, if a large area is available the problem is not too serious, but if the practice room is small the floor target will have to be limited in size. By this we mean that a lower net and an easier swing will have to be used; otherwise the player will overshoot the target. The ceiling will also have to be sufficiently high since this shot calls for a sharp rise. In the event the ceiling is low, the target may be placed on the wall. A player should try to get as much height as possible and not hit line drives.

Because of the possibility that a little less height than is necessary to clear the net may penalize the player, a series of vertical limits may be out-

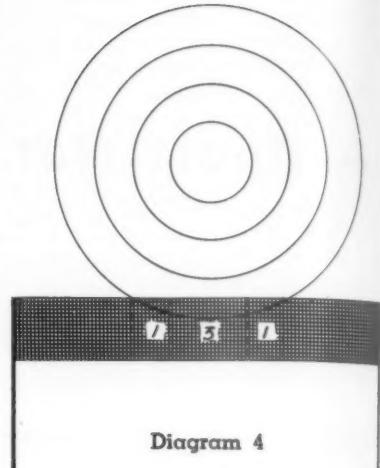


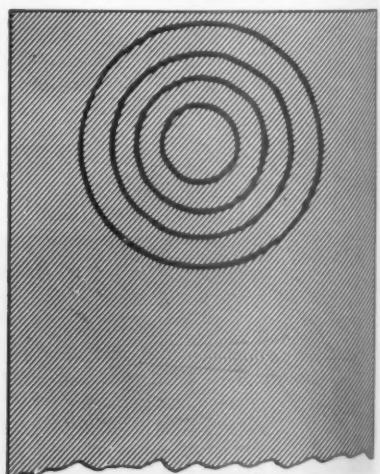
Diagram 4

lined with adhesive tape on the center area of the net (Diagram 4). Thus, if a shot strikes the net on a line with the center of the target, the player may receive a score of three. If the ball lands in the net somewhat to one side of this center area, the score may be counted as one. Any shot that does not at least clear the lower level of the net should be counted as a zero.

A target for the chip shot can be made of concentric circles on the floor, similar to the target for the pitch shot. Since this shot is a relatively short one, the circles should be smaller. A flat obstacle of some sort should be placed between the hitting mat and the floor target. The shot should clear the obstacle and land in the target area. Should the shot strike on the obstacle, an arbitrary score of three may be credited if it is on a line with the target.

(Continued on page 59)

Diagram 4



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Complete Price, including shirt and pants processed in your own school color with your own design . . .

**\$1.60 per uniform.
For extra-large size: Add 10%**

T-Shirt: Style 78QS. White.

Gym Pant: Style KE/8. In following colors all stocked for immediate delivery: Dk. Green, Kelly, Navy, Royal, Maroon, Scarlet, Gray, Black, Gold. Full elastic waist. Sizes: XS-S-M-L.

Complete Price, including shirt and pants processed in your own school color with your own design . . .

\$1.65 per uniform.

For extra-large size: Add 10%

T-Shirt: Style 84QS. In following colors all stocked for immediate delivery: Dk. Green, Orange, Purple, Kelly, Navy, Scarlet, Maroon, Royal, Gray, Black, Gold and Old Gold. Same construction as 78QS. Sizes: XS-S-M-L.

Gym Pant: Style KE/8. Complete Price, including shirt and pants processed in your own school color with your own design . . .

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	Pitcher	Pitcher	Pitcher	Pitcher	Score
Batter	MONTAVONI	HINKLE	SUTHERLAND	DELEGADO	
1. CICERO	+2	+1	+2	-1	+4
2. SCOTT	+1	+1	-1	-1	0
3. NAPOLEON	+1	+1	+1	-2	+1
4. RAYBOURNE	-1	+1	-2	+1	-1
5. REYES	+2	+1	+2	+2	+7
6. PEREZ	+1	+2	+1	+1	+5
7. WINKLOSKY	+1	-2	-1	+1	-1
8. HAMMOND	-1	+1	-1	+1	0
9. WASHBURN	+1	+1	+1	+1	+4
10. BLACK	+1	+1	+1	+1	+4
Total	+8	+8	+3	+4	+23

Chart 1

Pitcher Selector— Batter Detector Charts

By STEWART BROWN
Baseball Coach, Balboa High School, Balboa, Canal Zone

BASEBALL managers and coaches always have the problem of selecting their best pitchers without taking half the season to decide upon them. Many methods have been devised and tried in a vain attempt to screen adequately the large number of aspiring pitchers who turn up each spring. The most common methods have been to allow a boy to throw as the coach stands over him and watches his stuff; or the coach may don the catcher's glove and get behind the plate to ascertain personally what the young man has *on the ball*. Still another procedure is to have the pitcher throw

to several batters and mentally note the results. We believe all of these methods have some merit. However, we do not believe a boy will turn in his best performance when his coach or manager is looking over his shoulder or receiving him, nor do we think the pitcher is given a fair chance if he is put in against a few batters, with the coach taking only mental notes on his work.

At Balboa High School we developed a simple device which proved to be quite effective during the past baseball season. Each pitcher is assigned to work a particular day against

Chart 2

	Pitcher	Pitcher	Pitcher	Pitcher	Score
Batter	MONTAVONI	HINKLE	SUTHERLAND	DELEGADO	
4. RAYBOURNE	-1	-1	-1	-2	-5

all batters (not more than twelve). The following day another pitcher has the pitching duties and so on until every pitcher on the squad has had an opportunity to face each of the batters. Insofar as possible the ingredients of the pitching selection test are kept constant in order to provide a valid record of each pitcher against the same batters.

To facilitate the accurate grading of each pitcher's performance, we decided to place a numerical value upon each duel between a pitcher and a batter rather than take verbal notes. In our opinion, the use of numerical values makes for a more objective evaluation of performance and at the same time is economical in regard to the time element. The scale which we set up to grade the pitchers is as follows:

Result of Pitcher's Labor	Evaluation of Result
Strike out	Plus 2 points
Poorly hit ball	Plus 1 point
Base on balls	Minus 2 points
Well-hit ball	Minus 1 point

In this scale positive points indicate the favorable performance of the pitcher; negative points show poor or inferior work on his part. There is always some controversy as to why more points are deducted from the pitcher's record for a base on balls than for a well-hit ball. More points are deducted to impress upon the pitcher the tragedy of the base on balls or *free pass* and he is penalized doubly for his indiscretion.

Chart 1 shows how this information is recorded on the pitcher-selector chart. Pitcher Montavoni struck out two batters, retired six on poorly hit balls, walked none, and gave up two hits for a positive total of 11 points.

Another problem which is very time-consuming during the selection of a baseball squad is the screening of batters. As in the case of pitcher selection, many techniques are in common use. Among these we have the old standby, *bunt one-hit five* routine with little or no attempt being made to evaluate the batting performance objectively.

After putting the pitcher selector charts to work, it was discovered that through the obvious method of adding the numbers obtained in the pitching-batting duels across the page, the total performance of each batter against each pitcher was apparent. In this instance the negative points indicate favorable batting performance; a high positive total shows inferior performance at bat. Again we run into the question, "Why are more points

(Continued on page 56)

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Little Tricks That Win Big Meets

By W. HAROLD O'CONNOR

Track Coach, Concord, Massachusetts, High School

MORE and more frequently high school and college track meets are being won by half-inches and fractions of seconds. A look at the National High School Track Honor Roll for 1955 makes the average coach wonder whether he is reading the times and distances of high school athletes or whether he has mistakenly picked up the intercollegiate records for the year. When we see high school high jumpers clearing heights from 6'5" to 6'10½" and high school broad jumpers going beyond the 25-foot mark, we wonder what is in store for us in the future.

What is true in the field events is equally true in the running events. Dozens of states are reporting high school sprinters under 10 seconds for the hundred. Many are shading 22 seconds in the 220 and the high school quarter-miler running in 49 seconds is no longer a rarity. High school half-milers who break 1:57 arouse a mild ripple of interest, but they have also been following the 4:30 high school miler who is tabbed as *nice but not sensational*.

Editor's Note — According to the National High School Track Meet on the center spread of this issue, 10 sprinters ran under 10 seconds in the hundred and 14 were under 22 seconds in the 220. The running time for two states was under 49 seconds for the 440 and in the 880, five were under 1:57. The time for the mile run in 12 of the state meets was under 4:30.

However, the big shock to the average high school coach is that he sees the same trend in all of his meets. He faces the realization that his 50-foot

shot putter may be defeated in a dual meet, not to mention a state meet. His 10.1 hundred-yarder and his 50-second quarter-miler are no longer *money in the bank*. Like the other coaches, he must look around for little tricks in technique that will gain a tenth of a second, an inch in height, or a six-inch difference in the shot. A good coach knows that there is now less margin for error.

The coach must start his planning with his practice schedule. Most coaches have learned through trial and error that certain practice procedures are not advisable; others have not. Perhaps a coach has seen his hurdler appear relaxed and smooth in practice, only to have him start timber chopping instead of timber topping in the big meet. The cause may be a common error. A coach should not make the mistake of permitting his hurdlers to practice at less than racing speed. Watch any top-flight hurdler, and it will soon be apparent that his warm-up, whether indoors or outdoors, is done at racing speed. He may take fewer hurdles, but he does not take them slowly. If a coach wants his hurdler ready for top performance, he should be sure the boy does no loafing during practice. A hurdler's length of stride will vary as he increases or decreases his speed.

As high jumpers are prepared for the big meets, the coach should check on the proposed opening heights. If the opening height is to be 5'6", then there is little point in having the jumper work out at 5 feet the week before. He should do his practice work at the opening height so he will

be ready for it psychologically on the day of the meet. It may be good strategy to have him work out at a couple inches above the proposed opening height.

Before setting up practice schedules for the 220 or 440 men, it is smart to learn, if possible, whether there will be trials and finals in the 440 or trials, semi-finals, and finals in the 220. A coach should also check on the number of trials in the hurdles, especially the 180 or 220 lows. We also have the endurance factor, even for the sprinters. Certainly the quarter-miler who must run a qualifying heat at near top speed, and a final even faster, should have a practice schedule for the preceding two or three weeks that will prepare him for such an effort. He is not facing the same test as the boy who can let go for all or nothing in a single race or in competition that is based on timed heats.

At the start of the season the coach should examine the hands of his shot putters carefully. Many high school putters complain that the shot feels big in their hands. This is especially true if the boy has small hands or short, stubby fingers. Shot putters of this type often find the smaller more compact brass shot more satisfactory than the larger iron ball. The putter should try both types and then state which one he prefers. This small item may prove valuable as he fights for those extra inches that win meets.

Another simple check may be made with the pole vaulters. A coach may find it advisable to shift the uprights backward or forward in relation to the take-off trough. Setting the uprights back toward the pit may be helpful if the vaulter is hitting the bar on the way up. Placing the uprights closer to the base line of the trough may solve some of the difficulties of the boy who is reaching his height too soon and coming down on the crossbar. Experimenting in practice with various positions of the uprights, checking the speed of the runways, noticing whether the boy is running against a strong wind or with the aid of one, all may help in determining the upright placement that will best assist the vaulter. In events like the pole vault, high jump, and broad jump, the groundskeeper can help all concerned by making the take-off area look smooth and inviting. Notice how quickly some boys fall apart when the ground conditions are poor and then the value of take-offs that really look inviting will be recognized.

In Detroit last spring, we learned a little trick for the running of 220's

(Continued on page 62)

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If it isn't a NISSEN, it isn't a TRAMPOLINE

By FRED E. HOWELL
Physical Education Instructor, Ocean City, New Jersey, High School

An Intramural Physical Education Program

PROVIDING the benefits and experiences of competitive athletics to the average boy, and the carry-over values of an intramural program to the athlete, are probably the greatest problems experienced by physical education departments.

We employ an intramural program in our physical education classes in order to provide more students with the benefits which are derived from competitive sports and intramurals; such as conditioning the body, learning to win and lose graciously, co-operation, leadership, team spirit, carry-over sports, etc. Our school, like many other schools, is faced with the problem of many students being unable to participate in after-school intramurals and athletics because of transportation problems and other commitments.

The Program

With the co-operation of our principal and superintendent the boys are assigned to gymnasium periods first and then the balance of their schedules are built around these gymnasium classes. Thus, we have homogeneous grouping in the gymnasium classes which makes for even competition. For example, all ninth grade boys will have gym the first period, all tenth grade boys the second period, all eleventh grade boys the third period, etc.

Gymnasium classes meet five times a week, 50 minutes daily, with the exception of the seventh and eighth grades which meet three times a week. Since grades seven to twelve are included in our gymnasium classes they are divided into two leagues. The junior league consists of the seventh,

eighth, and ninth grades and the senior league consists of the tenth, eleventh, and twelfth grades.

Alphabetical letters are used for team designation, with four teams to each class, totaling twelve teams in each league as follows:

		7th Grade — Teams	A-B-C-D	
Junior League	8th "	"	E-F-G-H	
	9th "	"	I-J-K-L	
		10th Grade — Teams	O-P-Q-R	
Senior League	11th "	"	S-T-U-V	
	12th "	"	W-X-Y-Z	

Although there are twelve teams in each league, each team plays only teams within its own grade.

This type of physical education program is popular with the boys. Usually, two instructors are required to conduct it and to officiate the games, because two games are played at the same time. However, in situations where it is not possible to have two instructors, a squad of officials can be organized in each class to officiate games.

Selection of Teams

Team captains or managers are selected by the instructors on their merits of leadership ability or their need of leadership ability. Once selected, these teams remain intact for the entire school year and team captains should choose team members for their all-around ability rather than for ability in one sport alone because team balance is imperative. The teams are selected the first or second day and will vary according to size.

Since evenly balanced teams are a necessity in order to maintain interest, the four captains toss for order of

choice of their classmates and then select them as follows:

Team 1	Team 2	Team 3	Team 4
1st choice	2nd choice	3rd choice	4th choice
8th "	7th "	6th "	5th "
9th "	10th "	11th "	12th "
10th "	15th "	14th "	13th "
Total...34	34	34	34

Instruction and drills in fundamentals are presented to each class and teams are allowed a few warm-up practice games or activities before league competition starts. Lists of the basic rules are displayed on the gymnasium bulletin board.

Activities

Activities in which the teams participate and can accumulate points are divided into four categories: major sports, minor sports, specialized activities, and individual sports.

Major Sports	Season	Games
Football	Fall	9
Basketball	Winter	9
Swimming	Winter	
Track and Field	Spring	
Softball	Spring	9

Minor Sports	Season	Games
Soccer	Fall	6
Volleyball	Winter	6
Tennis (Doubles)	Fall	6
Gymnastics	Winter	

Individual Sports	Season	Games
Football Passing	Fall	
Basketball Free Throw Shooting	Winter	
High Score Swimming	Winter	
High Score Track	Spring	
Baseball Pitching	Spring	

Specialized Activities	Points
Teams all in uniform by beginning of second week	2
Teams with 100% qualified swimmers	2
Advanced swimmers (each team member)	1/3 Pt.

Scoring

Scoring for the final standings in each sport is based on the following system:

Major Sports	Minor Sports
1st place 10 points	1st place 8 points
2nd " 8 "	2nd " 6 "
3rd " 6 "	3rd " 5 "
4th " 5 "	4th " 4 "
5th " 4 "	5th " 3 "
6th " 3 "	6th " 2 "
7th " 2 "	7th " 1 "
8th " 1 "	

Individual Sports
1st place 5 points
2nd " 4 "
3rd " 3 "
4th " 2 "
5th " 1 "

Separate league charts, listing the teams and sports of each league, are kept on the gymnasium bulletin board with a listing of the sports whether major, minor, specialized or individual, and their up-to-date points.

The record and schedule for each team in the various sports are recorded daily on oak tag panels which have been mimeographed. These charts are displayed on the bulletin board, a separate one being used for each sport.

Each win on the daily record gives the victorious team two points, a tie one point, and a loss no points in the final tabulation.

As an illustration, in senior softball, team Z accumulated 18 rating points as a result of its nine wins. Because team Z now has the best record in the senior softball league it then picks up 10 points in the intramural league standings as softball is a major sport. Teams O and T were tied for second so they divided second place points, thus receiving seven points each.

Periods and Participation. Class periods should be of at least 50 minutes duration. Each boy is required to be in full uniform and each one must participate in all sports, thus providing teams of 15 and more players for football, soccer, etc. The large number of players does not take away from any of these sports, but does

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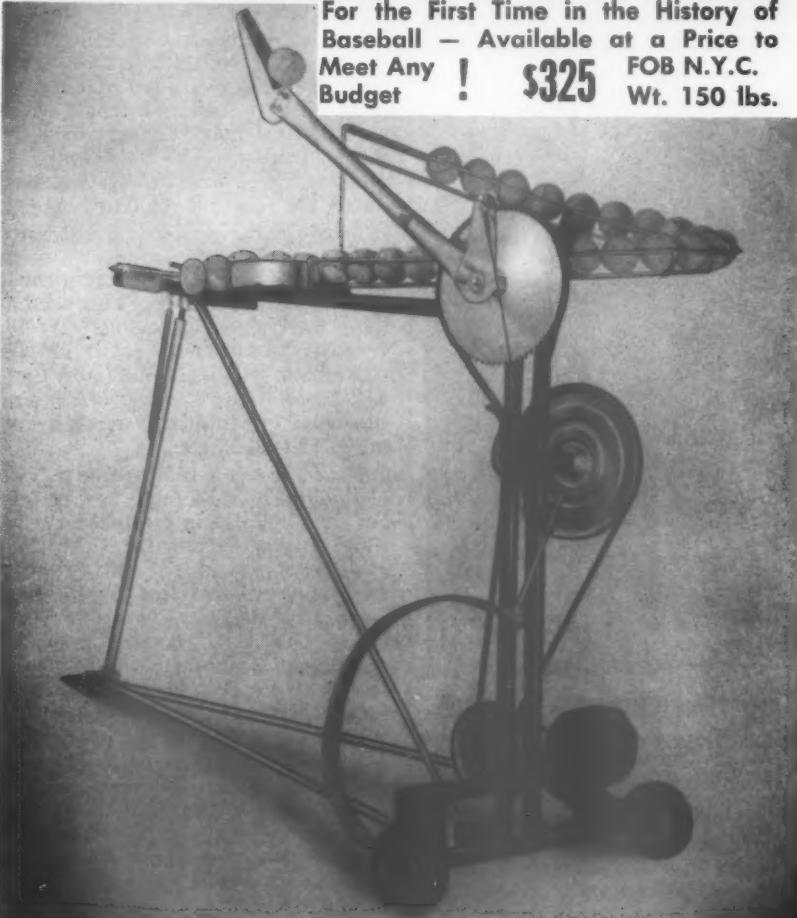
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JOURNAL

FRED "DIXIE" HOWELL prepared two articles for us in the past, one on facilities and the other on the knee joint. Howell is a graduate of Springfield College and holds a master's degree from Columbia. He is head coach of basketball and baseball and teaches in the physical education department at Ocean City High School.

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create a problem in basketball. Solution of the participation problem in basketball will be explained.

Salient Intramural League Sports Rules. The rules for each sport are posted next to the schedule on the gymnasium bulletin board. These rules are modifications and additions to the regular rules in order to adapt the game to smaller areas, in some cases, and to serve as an equalizer in certain sports, such as baseball where we find few good catchers. For example, bases may be stolen only on a swinging strike. Unless otherwise stated, the rules are standard.

Before participation is started in a sport the coach takes a week or so to discuss and demonstrate the correct fundamentals and rules. This preliminary work serves a two-fold purpose. It assists the varsity performer and the non-athlete who is the spectator. Both will be informed about the values of carry-over sports, such as tennis, swimming, volleyball, etc.

Touch Football (Major Sport). Two intramural football fields may be laid out on a regulation football field by running them across the field. The midfield stripe or the two 40 yard lines and the goal line can be considered as sidelines, with the regulation field sidelines serving as the goal lines. Corner flags will define the two fields to advantage. Schools with larger playing areas will have no trouble laying out two separate fields.

1. Intramural touch football games are played in two halves, the length of each half being decided by the length of the gymnasium period. The captains toss for the choice of kicking or receiving and the end of the field they will use.

2. Ball-carriers are considered stopped if they are touched simultaneously by an opponent's two hands above the ball-carrier's waist.

3. All members of each team must participate and be in required uniform. Variations in the size of teams due to absences, etc., should have no great effect on the game.

4. If the fields are cut down in size, penalties should be made in proportion. For example, if a field is 50 yards in length, a kick-off out of bounds will be put in play on the 20 yard line instead of on the usual 40 yard line on a regulation field.

5. All members of the team are eligible for passes.

6. Blockers may not leave their feet when throwing a block. The penalty is five yards.

7. A team may call for punt protection on the fourth down only by signifying its intentions to the official and to the opponents. Both lines must

remain stationary at the snap of the ball until the instructor counts up to three.

Basketball (Major Sport). The game is played in six, five-minute quarters, varying according to the length of the gymnasium class. In order that every member of each team may participate, no player on a team may play more than four quarters nor less than two quarters. This method will provide at least two quarters for each player as the teams do not exceed 15 players. Larger intramural teams will require a further limitation on the number of quarters a player can play.

Swimming (Major Sport). The type of events to be used can be determined by the instructor. At Ocean City our intramural teams engage in the following events: 30 yard free style, 90 yard free style, 1/10 mile free style, 30 yard backstroke, 30 yard breaststroke, 45 yard individual medley, underwater for distance, 90 yard medley relay (three men each swim one length) and the 120 yard relay consisting of four men from each team swimming one length.

All members of each team must be prepared for pool activity and the contestants are decided on by the team captains in the preliminaries. The team that gains the most points picks up 10 points for first in a major sport in the intramural league.

Our health program is conducted in close association with the physical education classes. One physical education instructor teaches the health class while the other instructor handles the pool period. This procedure enables half of the students in one gymnasium class to have pool activities while the other half attend health class.

Soccer (Minor Sport). 1. Because our two soccer fields are cut down in size, the size of the soccer goals is also decreased. We maintain the regulation height of eight feet but cut down the width from 24 feet to 15 feet. 2. The entire team participates at the same time. Some teams will number 16 or more players. 3. Sneakers must be worn by all players.

Volleyball (Minor Sport). 1. The team that wins the best out of three games determines the winner. 2. If a team is winning a deciding game by at least two points at the conclusion of the period, it is considered the winner of that game. 3. The length of the class will determine whether the game will be played to 15 or 21 points.

Track and Field (Major Sport). 1. Every member of each team must compete. 2. Track events are as follows: 50 yard dash, 100 yard dash, 220 yard

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dash, 440 yard run, shot put, high jump, broad jump, discus, javelin, 400 yard shuttle relay, and the 880 yard relay. 3. Records are kept from day to day and are computed at the completion of the events. The team that picks up the most points receives 10 points, the second receives eight points, etc. 4. Records for each event are displayed in a prominent place.

Tennis Doubles (Minor Sport). 1. At the beginning of the gymnasium class the captains of each team list their doubles teams according to ability. Then they are paired and assigned to a court. 2. The doubles team that wins the best out of five games picks up one win for the team and the team with the most doubles winners is declared the winner.

Gymnastics (Minor Sport). 1. Gymnastic events can be adjusted to the existing facilities. We use chin-ups, push-ups, and sit-ups. 2. Scores in sit-ups and chin-ups are determined by the number accomplished within a period of five minutes. One team's count is kept by the other team. 3. In sit-ups the participant's elbow must touch his knee in order to be legal and in chin-ups he must go down after each chin-up so that his elbow is above his shoulder. 4. Rope climbing is another good gymnastic activity.

Our intramural physical education program has been successful in that our students have received the benefits found in body conditioning, leadership, and good sportsmanship.

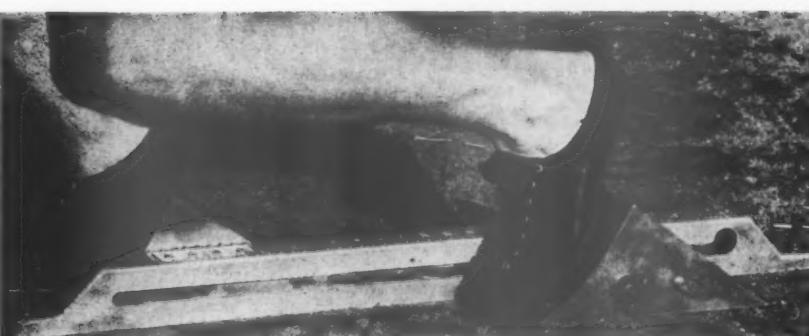
Store Your Equipment

(Continued from page 19)

Pads, Hip Pads, Knee Pads, Rib Pads and Shoulder Pads. We will discuss the pads as a group. After all pads have been checked in, they are placed in the sun for four days to make sure they are dry. Each pad is checked for needed repairs. If a pad is in usable condition, it is brushed thoroughly, the straps are loosened, and it is stored on a shelf close by the hot water heaters in the gymnasium. Shoulder pads and hip pads are stored in stacks of four, while the other smaller pads are stored in larger stacks.

About a week before the close of school all pads are checked to see if the moisture has caused them to mold. Usually, we find a dozen or so that have molded. Then these pads are cleaned, or sent to a reconditioner for cleaning purposes. If they were not properly cleaned, the molded pads would be of no value.

Practice Shoes. Our practice shoes are cleaned with a liquid cleaner and leather softener. Shoes that are worn-



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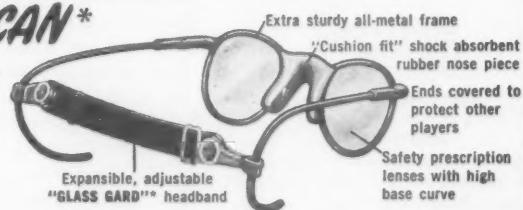
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Space does not permit showing the names of the many additional professional players already using MacGregor gloves and mitts.



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out are discarded and those that need repairing are placed in a separate pile. The shoes that are reusable are tied together and placed on shelves according to size.

Practice Pants and Jerseys. At the conclusion of the football season all practice pants and jerseys are washed. Then they are checked for repairs. Those found to be beyond repair are given to our school bus mechanic for rags. Rags are to a mechanic, as shoulder pads are to a football player.

Many of our teachers help us with the upkeep of the equipment. As an example, the home economics teacher repairs a large number of our practice pants and jerseys for us each year.

Sideline Coats. At the end of the football season our suede sideline coats are cleaned with a suede brush. Then they are stored in a large closet on wooden hangers. This method is very satisfactory because they are clean and neat without creases when the

boys are ready to use them again.

The remaining items which are considered football equipment are socks, stockings, supporters, tee-shirts, and towels.

After it has been cleaned, all of this equipment is checked and the worn-out articles are discarded. Equipment that is retained is then placed in baskets and stored in a large cabinet in the gymnasium. Moth crystals are sprinkled in the baskets that contain wool items such as stockings.

Charger. Our charger is dismantled at the end of the football season and stored in the gymnasium to keep it out of the weather. The ducking is brushed and the parts that can be painted are repainted. This item is one of our prize pieces of equipment.

Under normal conditions football equipment can be expected to last only a limited time, but proper care will add years to its life and this will mean money saved to buy other essentials.

NEW ITEMS IN EQUIPMENT AND IDEAS

For further information see Service Coupon, page 68



NISSEN
TRAMPOLINE
PICTURED is the new nylon canvas trampoline bed developed by Nissen. This new type bed is much lighter in weight yet will outwear the standard cotton canvas bed. In performance it is almost equal to the intercollegiate woven web bed yet costs about a third less. The nylon canvas is double thickness throughout. The D-rings for cable attachment are firmly secured by nylon moorings, stitched five times with nylon thread to insure strength and uniformity. Nissen Trampoline Co., Cedar Rapids, Iowa.

THE MacGregor Company has just issued two new athletic equipment catalogs for this year. The spring and summer edition shows Oklahoma University on the cover, and the fall edition shows a view of the Ohio State campus. These catalogs are sent to all high schools and colleges. Additional copies are available from The MacGregor Co., Cincinnati 32, Ohio, or by using the Service Coupon.



DEALLY suited for all teams from Little League to the majors, this coaching kit is excellent for illustrating offensive and defensive tactics, bunt protections, run-downs, and pick-off plays. The kit includes 17 player pieces, 1 ball, 1 arrow, 1 magnetic eraser, 1 chalkholder, 3 official, and 48 special self-adhesive player labels. The board is green with the skinned infield painted brown. The packing carton serves as the carrying case. Size 18"x24"x1". Price \$14.95. Maggie Magnetic, Inc., 39 West 32nd St., New York 1, N. Y.

for January 1956

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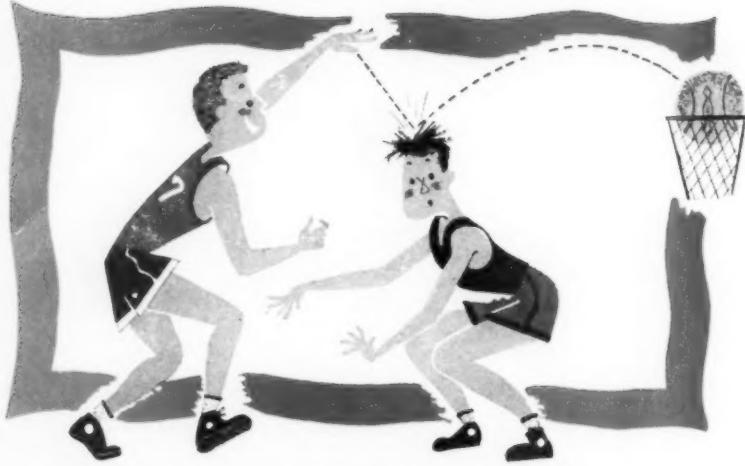
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Swimmers

(Continued from page 16)

The value of land drills is not always immediately apparent to the coach and the swimmers, and sometimes discouragement or doubt may be the result. It is a mistake to expect miracles from land drills the moment a team enters the water for training, for exercises are only one phase of training the competitive swimmer.

In our experience the time we begin to notice the good which the exercises have done for the team is about midway through the season. Just as we are beginning to think the team is slow in rounding into shape, progress takes a quick turn for the better, and the boys seem to take hold and improve in a visible manner from that point until the end of the season. Of course, this may be only one person's experience and the sudden noticeable change may be due to a combination of training techniques. However, we are convinced that the exercises do add strength and flexibility to a swimmer's muscles and seem to be of special value to the inexperienced youngster who has not seen too much competition.

We are using the accompanying list of pre-season calisthenics to condition our University of Florida swimmers:

1. *Sitting Position.* The swimmer's hands are behind his neck with his legs spread, knees straight, and toes pointed. He bends his trunk forward and downward as far as possible, and then returns to the sitting position.
2. *Lying on Back.* In this exercise his hands are stretched out overhead, legs spread, and toes pointed. He swings his trunk through the sitting position, stretches forward as far as possible, and then returns to his original position. Then he alternates touching the toes of his right foot, then his left, etc.
3. *Sitting Position.* The swimmer's legs are spread, and his arms are stretched out to the side. He twists his trunk to the right and touches his right foot with his left hand without bending the trunk, and then returns to his original position. The exercise is repeated to the left.
4. *Sitting Position.* His legs are together, with his hands grasping his ankles. He bends his trunk forward and touches his head to his knees. The knees should not be allowed to bend.
5. *Sitting Position.* The swimmer's

hands are on the floor slightly behind his hips, his feet are together, and his toes are pointed. He swings his hips up, arching his back until the soles of his feet are flat on the floor. Then he returns to his starting position.

6. *Lying on Back*. He raises his legs six inches off the floor, with his knees straight, and toes pointed. On command he opens and closes his legs. His legs are kept stretched and his feet are off the floor throughout the exercise.

7. *Sitting Position*. Now his arms are stretched overhead. He kicks his legs alternately in the up and down flutter motion. The action comes from the hips. His feet are kept off the floor throughout the exercise.

8. *Sitting Position*. He assumes a hurdler's position. Now he bends his trunk forward over his extended leg, reaching as far forward as possible and returns to his starting position. He extends his opposite leg and repeats.

9. *Prone Position*. The swimmer's hands are locked behind his neck, his feet are together, and his toes are pointed. He raises his head and chest upward and returns to the starting position.

10. *Prone Position*. His hands are placed alongside his hips, palms down. He lifts his legs as high as possible and returns to the starting position.

11. *Prone Position*. The swimmer is resting on his elbows, feet together, and toes pointed. Now he raises his hips up with his weight falling on the instep, and then returns to the starting position.

12. *Prone Position*. In this exercise his arms are extended, his toes pointed, and his knees are straight. He lifts one leg at a time into the air, having the action come from his hips. His back is arched.

13. *Prone Position*. His arms and legs are extended. Then he flutter kicks. His head should be kept up and no head movement should be allowed.

14. *Supine Position*. The swimmer's arms are overhead, his feet are extended, his toes pointed, and his knees are straight. He swings his body up into a jackknife position and then returns.

15. *Standing Position*. His arms are interlocked overhead. Then he takes in a breath of air and stretches upward as far as possible, raising up on his toes. He exhales and returns to his original position.

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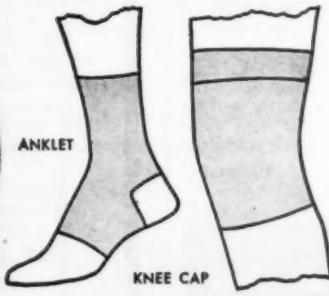
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Fundamentals of Soccer

(Continued from page 12)

rather than the crossbar. Otherwise, he will almost always head it over the top of the goal.

Tackling

Tackling in soccer is quite different in both purpose and execution from tackling in football. The purpose of the football tackle is to stop the ball-carrier by knocking him down. The purpose of the tackle in soccer is for the player to take the ball away from his opponent and play it to his advantage.

Body contact may occur legally in a soccer tackle but only under certain prescribed conditions set forth in the rules. Contact must be made only with the shoulder or upper arm held close to the body and from an upright position with one or both feet on the ground. The contact or charge must not be violent or dangerous, and a player may not charge an opponent from behind except under special circumstances which are defined in the rules. Finally, the tackler

must make a clear effort to play the ball; he cannot charge a man indiscriminately without regard for the ball (Series H).

As a general rule in tackling, the tackler tries to block the ball firmly with the inside of his foot. He does not kick at it. He simply steps in to block the path of the ball with the inside of his foot. If possible, the tackler leans over the ball and crouches slightly to protect himself against the expected shoulder impact which might otherwise knock him off balance. His body weight should not be placed entirely on the tackling foot because if the ball is caught between two players, the defender will want to recover it first by flipping it free over the attacker's foot. By keeping part of his weight back, he can make this recovery more quickly. On the other hand, if the tackling foot is not supported firmly with some weight, the momentum of the dribbler may carry through the defender and make the tackle ineffective (Series I).

It is essential that players thor-

oughly understand the rules pertinent to tackling. Each part of the rule, e.g., position of the arms, use of the shoulder, etc., should be carefully explained and demonstrated by the coach. If they are not properly instructed, American boys are apt to apply football tactics to soccer. The result is extremely detrimental to good soccer because it will hinder the development of individual skill and finesse. Furthermore, soccer has plenty of action, competition, contact, and opportunities for the display of courage to capture the imagination of American youth without adding roughhouse tactics.

Following the discussion and demonstration of proper tackling, players may work in pairs from a distance of five yards apart. One player dribbles forward and the other player tackles. This practice should be conducted slowly at first under careful supervision before the distance and speed are increased and the dribbler is allowed to try to elude the tackler. An excellent lead-up game for tackling practice is to play three or four-man team keep-away within the penalty area. No effort should be made to score but one team tries to keep pos-

(Continued on page 66)

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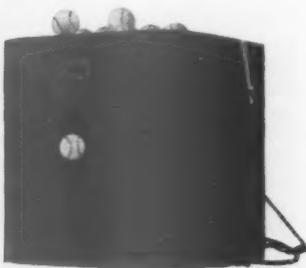
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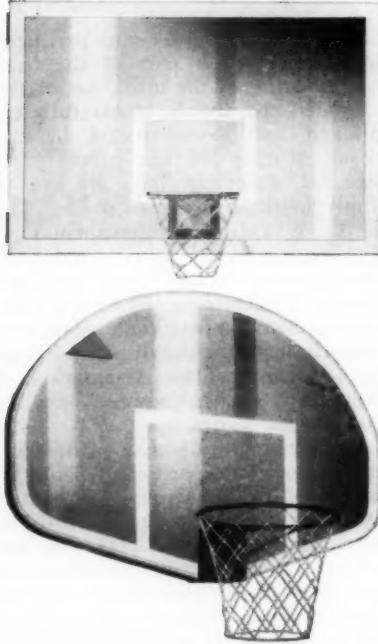
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Baseball Charts

(Continued from page 42)

given to the batter for a base on balls than for a well-hit ball?" One of the most important lessons that must be learned by young batters is to refrain from going after bad pitches; hence, the batter who can work the pitcher for a walk is displaying both a keen batting eye, ability to refuse bad pitches, and is awarded a minus two points. With the addition of the batter-detector phase on our charts we were able to ascertain objectively which batters and which pitchers should be kept on the squad after the first cut.

The final use to which these charts have been put is as an aid in discovering which batters can or cannot hit various types of pitches, and, conversely, which pitch in a pitcher's repertoire is his most effective delivery and which is his poorest. Information of

GRADUATING from Pittsburgh in 1949, Stewart Brown coached two years at St. Justin's High School and two years at Taylor Allderdice High School, both in the city of Pittsburgh. His last two teams at Balboa have been Canal Zone champions. A year ago he prepared an article entitled, "Balboa Pitching Charts."

this nature enables the coaching staff to work on that phase of the individual's game which is the weakest. A pitcher knows which pitch he can depend upon to use when the going is rough.

Chart 2 shows a chart with pitchers throwing nothing but curve balls, indicating the effectiveness of each pitcher's curve and the ability of the individual batter to hit a curve. For an example of how this information is recorded and used, let us look at Raybourne's performance at bat against curve ball pitching. It can be noted readily that Raybourne was very successful against the curve balls of all the pitchers in the drill, having earned a total of a minus five on three hits and a walk.

As shown in Chart 3, each pitcher was allowed to throw only fast balls. On checking the work of Montavoni

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it is apparent that his fast ball is very good, earning him a total of 11 points. Other charts show that Raybourne garnered a minus two points batting against fast balls only, indicating that he hits both types of pitching well with a slight preference for the curve

Batter	Pitcher
CICERO	MONTAVONI
SCOTT	+2
NAPOLEON	+1
RAYBOURNE	-1
REYES	+2
PEREZ	+2
WINKLOSKY	+1
HAMMOND	+1
WASHBURN	+1
BLACK	+1
Total	+11

Chart 3

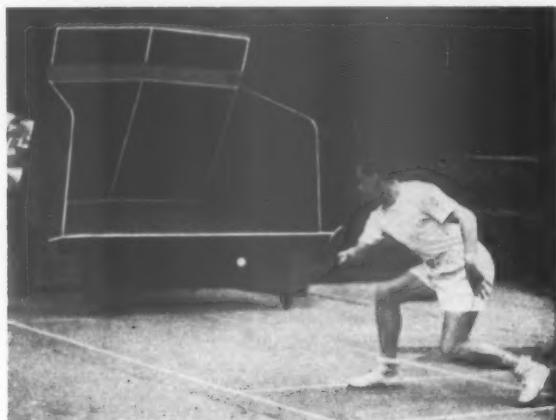
ball. Montavoni, using only his curve ball, finished with a positive score of seven which informs us that his fast ball is his best pitch and his curve is also reliable.

Frequently, during the year, the pitchers are given the opportunity to mix their pitches against the various batters. Chart 1 shows the results of a drill of this kind.

Finally, the master chart, is a summary of all charts tabulated up to date. From it we can readily ascertain how well the various batters have been faring against different pitchers and different deliveries, and how well the pitchers of the squad have performed against the individual batters.

Through the intelligent and industrious use of these charts we are confident that the high school coach can accomplish much in a comparatively short time on the batting and pitching possibilities of his young athletes. It should be remembered that the charts are accumulative in nature and their value increases with each additional recording of observations.

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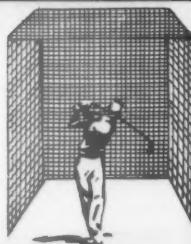
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High School Track Meet

(Continued from page 36)

The meet also affords an opportunity to study individual events. The following table shows the average times and distances for the first five years; for the second five years; and this year's meet.

Event	'47-'51	'51-'55	1956
120 H.H.	15:32	15:24	15:10
100-Yd.	10:20	10:14	10:15
Mile	4:39.01	4:37.21	4:36.17
880 Ry.	1:33.65	1:33.64	1:32.86
440-Yd.	52.15	51.57	50.85
880-Yd.	2:02.1	2:02.3	2:02.5
180-Yd.L.H.*			20.27
220-Yd.	22.56	22.43	22.27
Mile Ry.**			3:30.29
Pole	11-5½	11-7	11-9
Shot	48-5	51-0	52-6
H.J.	5-8½	5-11	3/8
Discus	140-4½	145-6	150-9
B.J.	21-4¾	21-6 1/2	21-8 1/2

*Only recently has this distance been recognized as the accepted distance for the low hurdle event.

**Mile relay just added to meet this year.

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The improvement is particularly noticeable in the field events, with the pole vault and broad jump progressing at almost an even two inches each time. The discus average for this year is 10 feet more than the average ten years ago, and the shot has improved by 4 feet in ten years. The 880-yard run is the only event that does not show an improvement. It is worth noting in this regard that for all the states for ten years only 36 new records have been set in this event. This compares with an event such as the discus where 66 records have been set during the ten-year period.

Each year accompanying the report on the National High School Track Meet, it is our privilege to present the National Honor Roll. This is the official honor roll compiled by E. A. Thomas for the National Federation. California led in the number of listings with 46 as compared to the 73 listings from California a year ago. Texas landed 36 on the honor roll. A year ago these two states dominated the honor roll with 60 per cent of the listings and they came within a fraction of duplicating that figure this year. In fact, 87 per cent of the listings came from the fifteen states previously mentioned. Of the eighteen listings not from the states in the Middle Atlantic, East North Central, West South Central and Pacific Coast regions, seven were from Kansas. Arizona and Utah each had three list-

ings and there was one listing from Connecticut, District of Columbia, Maryland, Nebraska, and North Carolina.

Since this year marks our tenth year of carrying the National Honor Roll we are afforded an excellent opportunity to compare performances. Shown in the following table is the best performance for each event for the 1946 honor roll and the 1955 honor roll. The third column shows the number of performances on the present honor roll which were equal to or better than the best performances on the 1946 honor roll.

Event	1956	1955	Performance Better
100-Yd.	9.7	9.6	4
220-Yd.	21.5	20.7	10*
440-Yd.	49.3	47.2	8*
880-Yd.	1:57.5	1:54.3	8*
Mile	4:24.0	4:19.5	6
120 H.H.	14.3	14.1	4
440-Yd.Ry.	43.7	42.6	7*
880-Yd.Ry.	1:29.1	1:27.2	4
Mile Ry.	3:26.4	3:17.9	8*
Pole	13-1 1/2	14-2	8*
Shot	59-5 7/8	59-4 1/2	—
Discus	160-2	175-8 1/2	8*
Javelin	184-10	211-7 1/2	4
B.J.	22-9 3/4	24-9 1/4	8*
H.J.	6-5 1/2	6-9 3/8	7

*Every listing for 1955 better than best listing in 1946.

Only in the shot put was the best performance for 1946 superior to the best performance for 1955. However, all eight listings on the current honor roll surpassed the second listing ten years ago by two feet or more.

Indoor Golf

(Continued from page 40)

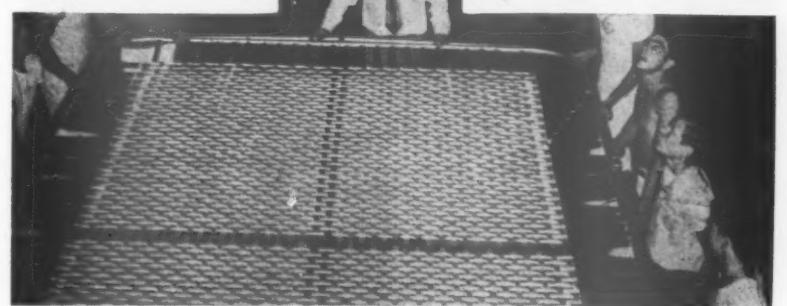
the apron of the green. The hitting mat may be placed so that it immediately adjoins a fairly long tumbling mat, or a comparable soft surface. A series of circles may be outlined directly on the far end of this surface. The scoring is on the same basis as it is for the chip or pitch shots. In this case the purpose of the shot is to have the ball come to rest in the target area, and in this way both distance and direction are evaluated.

Scoring the putt is fairly simple, if the cocoa mat, previously mentioned, is used. Mark a circle $4\frac{1}{4}$ inches in diameter near the far edge of the mat (Diagram 5). Make concentric circles around this inner circle, or cup, as indicated. If the distance from the ball to the cup is about 20 feet, the first circle may be one foot in diameter and each larger circle one foot greater in diameter, as is shown in the diagram. The scoring will de-

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and LAURENCE B. CHENOWETH,
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Considered throughout this text is the need for educators qualified to prepare and administer a program of health education. The authors have set forth all of the facts needed to qualify teachers without medical education to give health instruction and assist with physical examinations and other health appraisal situations. Emphasis is placed upon normal as well as the common abnormalities found among school children. Even in schools where there are physicians and nurses, this book will be effective in helping teachers to cooperate with them. Subjects that are new or rewritten for this new 5th edition include respiratory conditions, menstruation, micturition, endocrine glands, impaired hearing, etc. Also new is an extensive Glossary.

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pend on where the ball comes to rest. In this test a regulation golf ball may be used.

If the coach or teacher wishes to use a little ingenuity, he can arrange the targets so that the shots may be played in much the same sequence as they are on a golf course. Long holes would start with a drive and follow with a two or three wood. A long iron or short chip shot would come next, depending on how well the preliminary shots were executed. A scoring scale can easily be devised to take into account the level of execution of the various shots in terms of par figures.

We have developed a game based on this idea and our students have found it very interesting.

As can readily be seen, indoor play has great possibilities. A minimum of additional equipment is needed, and a large area is not essential. Both beginners and advanced players can be accommodated and, if necessary, they can use the area at the same time. In this way both class instruction and team practice will benefit. Golf can be conducted on an all-year-round instructional basis and the coach will be able to keep his players in condition during the off-season.

Game Strategy

(Continued from page 22)

contribute considerably to the biginning.

Bunters. As a rule, good bunters are frequent bunters. They are the players who can be depended upon to do the things most often that they do the best. This is sound offensive strategy. The place of these players in the line-up should be planned in order to provide maximum opportunities for their abilities.

From the defensive standpoint, good bunters influence infield and pitching strategy, particularly in sacrifice bunt or squeeze situations.

Long Ball Hitters. Long ball hitters are usually placed in the third, fourth, or fifth spots in the line-up, depending upon their frequency in getting on base. The batter who gets on base most often is usually placed in the upper position.

During the past ten years there has been a tendency to move long ball hitters into the No. 3 spot, and occasionally into the No. 2 spot in order to give them more times at bat over a season's play. With a base-runner on third base, the long ball hitter may score that runner with a fly ball. He should also contribute to the biginning with his occasional extra base hit. Batters who get on base frequently should bat ahead of the long ball hitter.

Clutch Hitters. Just as some players run faster than others, or field better than others, so do some batters drive in more runs than others. In other words, some batters, due to their mental and emotional makeup, are able to meet situations better in a crisis. They tend to come through in the clutch more often than other players. Others may have equal opportunities, but the good clutch hitter gets better results from his opportunities. This type of hitter must be placed behind the two or three players who get on base most frequently, thus increasing the possible runs batted in potential of the clutch hitter. This type of hitter should be allowed to hit straight-away rather than bunt, fake bunt and hit, or hit and run. He should be allowed to concentrate on driving in runs.

Base Stealers. One stolen base can mean victory. A successful steal of second base places a runner in a scoring position where he can often score on one base hit. It can also be used as a substitute for the sacrifice bunt.



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A successful steal of third base, with one out, weakens the defensive position and strengthens the offensive possibilities for a score.

Good base stealers should be placed in the line-up with strategy in mind. Most managers and coaches place their best base-runners in the first, second, or seventh positions.

From the defensive standpoint, base stealers must be watched much more closely and intimidated more often than ordinary base-runners.

Fake Bunt and Hit Players. The fake bunt and hit is an offensive strategic maneuver which is used against a pressing or crowding defense in a bunt situation. The fake bunt and hit maneuver is most readily adaptable when base-runners are on first and second with none out. With the proper player at the plate the fake bunt and hit can be a devastating maneuver and may lead to a big inning when it is successful. It is worth mentioning, at this time, that the odds are six to five against advancing both base-runners by means of the bunt in the major leagues.

Individual Temperaments. While sportsmanship should always be observed, a certain amount of repartee between players goes on in most games. The purpose behind this strategy is to get a player's mind off the game. Occasionally, games are won and lost through this psychological strategy. Players should be instructed against falling for this age-old maneuver. It should be employed only within the limits of fair play and the rules. Its importance as a strategic maneuver should not be overemphasized; nor should an understanding of this maneuver be overlooked.

Knowledge of the Opposing Managerial Philosophy. Knowledge of a manager's or a coach's philosophy sometimes acts as a tip on the type of strategy to expect in various situations. Some baseball men are conservative. They play according to the book, think conservatively in terms of the type of strategy to employ, and seldom take chances.

Others play hunches, and are apt to try and surprise the opposition. This type of manager usually bases his hunches on the ability of his own players rather than on the weaknesses of the opposition.

There is still another type of baseball manager or coach who relies to a considerable extent on the element of surprise. This type of baseball man is willing to gamble on his strategic impulses and thoughts, both offensively and defensively.

Actually, a manager or coach should employ all three philosophies, inter-

changing them according to the caliber of the opposition. Some teams can be defeated through conservative strategy plus patience in the hope that the opposition will defeat themselves by means of a few mental lapses and mistakes in the field.

Some managers and coaches favor definite types of strategy in specific situations. They have their favorite plays, and they use these plays consistently.

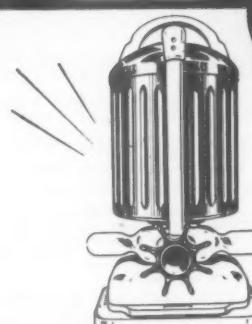
The thinking pattern of the manager or coach determines the type

of strategy used in a specific situation. One manager may be extremely partial to the hit and run play. Another will not favor the hit and run as an offensive weapon, but will favor the steal.

Some managers seldom use the squeeze play; others will use the squeeze play frequently. Some managers refuse to use the safe squeeze. They do not believe in its chances for success; however, these same managers may believe in the suicide squeeze.

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(Continued from page 44)

around a turn. The idea is colorful but, more important it is a practical aid to better performance in the event. Boys running in staggered lanes around a turn sometimes become confused when they reach the straightaway. They are uncertain which lane is the right one for each runner. Mich-

Imagination plays an important role in managerial strategy. The ability to visualize possible situations and their consequences is an aid in widening the horizons of strategic maneuvers. Imagination is a motivating device toward the implementation of ideas. It stimulates the mind toward decisions to carry out the element of surprise.

Personal contact with managers, and alert study of their strategy will often reveal their philosophy regarding the choice of strategic maneuvers.

Feeling the Pulse of the Game. In order to know what to do at any point during a game the manager or coach must absorb himself in that game from the first pitch. He must study the tendencies of fate in each game, and be abreast of each situation as it arises in the progress of the game. He must have his mind on the developments of the game, and be so engrossed in the game that he can sense its tendencies, and give fate a helping hand in the right direction at the right time through the right strategem. Many times at games we hear a spectator say, "All we need is one hit right now to start a big rally and win this game," or he may say, "One hit will upset this pitcher so much at this time that he will fall apart." These people sense it in the air, or they feel it in their bones. Actually, they are feeling the pulse of the game. They have been so engrossed in the game, its tensions, its progress, and its pattern that they cannot help but feel that one event happening at the proper time can lead to victory or defeat. The manager or coach who stays abreast of and studies each event in the game will be able to feel the pulse of the game, and will be able to select the proper strategem at the proper time to win that game.

The chart at the beginning of this article shows how three teams of varying ability might employ offensive and defensive strategy. Modifications of strategy on any given day will be dependent upon weather, field, individual personnel, managerial philosophy, and the pulse of the game.

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ETIC JOURNAL

N more than a quarter of a century of coaching high school track in Massachusetts and Rhode Island high schools, W. Harold O'Connor has seen his teams win over 100 track meets. He authored the article, "Is Your Track Team Ready?" which appeared in these pages two years ago.

igan solves this problem in its state meets by having the lanes marked with different colored lime. The addition of a little color aids the runner in following his own lane. A runner simply follows the lane with the blue on his right, the red on his right, the yellow on his right, or whatever color indicates the lane to which he has been assigned. Fewer fouls for running out of lanes, less hesitation on the turn, and slightly better performances have been the result.

While good sharp spikes are a recognized aid for outdoor racing, they are even more important for indoor meets. Failure to replace worn spikes has caused a slip at the start which meant the loss of many an indoor dash or hurdle race. If starting blocks are not used, the need of needle sharp spikes is even more pronounced.

When indoor races must be run in flats, a competitor will get better purchase for his start if he roughs the soles of his shoes with a fine file.

It seems to us that in recent years we have been watching as many one-shoe runners as we have one-shoe high jumpers, but we are sure that the former condition is not according to the wishes of the competitor. He may please the crowd with a courageous race after throwing a shoe, but may be sidelining himself for the next few meets as a result. It seems elementary to insist that a runner check his shoelaces before a race, but the boy often has to be reminded. A few turns of adhesive tape around each foot sometimes saves the loss of a shoe. This precaution should not be neglected and the manager should always have a supply of extra shoelaces on hand. Nervous competitors have a tendency to break laces at a moment's notice.

Roger Bannister, in his planned attack on the four-minute mile, left nothing to chance. He mentioned the use of graphite on the soles of his running shoes to prevent caking around the spikes on a wet track. It was just a little thing, to be sure, but from now on more and more little things are going to constitute the difference in winning and losing track meets.

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16' (vaulting).....	2.6 lbs.	7.25
18' (vaulting).....	2.9 lbs.	8.00

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Training a 6' 10" Jumper

(Continued from page 15)

the Southern California Track and Field finals. The week following he placed second in the state meet held at Berkeley with a leap of 6'4".

Let us take a look at Charlie's major achievements during his senior year:

1. Set a new National Interscholastic record of 6'7½" eclipsing Gil La Cava's 17-year-old mark by $\frac{1}{8}$ of an inch.
2. Established a new Bay League record at 6'8½".
3. Leaped 6'8¾" in the CIF finals.
4. Set a new National Interscholastic record at 6'9¾".
5. Shared a new West Coast Relays record with Shelton at 6'10".
6. Sailed over the bar at 6'10¼" at the SPAAU contest.
7. Tied (with Shelton again) at 6'10" in the National AAU meet and narrowly missed 7' on his third try.
8. Established a new British West Indies mark in Kingston, Jamaica.

This year we look for Dumas to add to these laurels and perhaps become the world's first 7-foot high jumper. Two things contribute to Charlie's accomplishments; his tremendous physical drive and his great competitive spirit. Without these he would still be jumping his height. In a small way we may have improved his technique by altering his approach. To compensate for Dumas' limited height, it was suggested that he increase the speed of his first five steps and further increase his speed during the drive in his final three steps. Dumas' approach is from the left side, measuring 36'8" from the point of take-off and involves a total of eight steps. (See diagram at the start of the article).

One of the greatest single factors commensurate with Charlie's performance is his ability to relax and apparently be oblivious to pressure as he stands with both feet planted side-by-side just prior to his approach. Rocking forward slightly, he takes his first step with his right foot. His succeeding four steps are also short, and his final three steps are lengthened, with his left foot being the plant foot. To further explain Charlie's approach, with the increase in the length of his last three steps, there is a noticeable increase in speed. As Dumas' left foot is planted for the lift to follow, his hip is dropped slightly. It might be interesting to point out here that his left foot is

planted at exactly the same angle as it is in the previous steps.

One of the mistakes made by many high school jumpers is that of toeing out with the plant foot which has the effect of bringing the hip into the bar before the peak of the lift has been reached. Following the plant of the left foot, Charlie with a tremendous leg kick, lifts his right leg perpendicularly as he ascends to the bar. Co-ordinating the effort in the arm action with the plant of the left foot plays a vital part in Dumas' success as a jumper. At the same moment Dumas' right arm is brought back slightly more than it is in the normal carry and is thrown upward vigorously just as his lead leg leaves the ground.

For the layout over the bar, which is described as the *face down belly roll*, Charlie's added touch of finesse is achieved by lifting his left leg sharply in order to compensate for the natural drop of his left hip and sliding horizontally over the bar. In addition, his left arm is tucked in close to his body, with his fingers extending to a point under his chin. The ensuing motion is that of the landing taking place on his right foot and rolling on his right shoulder.

Early Season Training Schedule

Monday:

1. Jog one lap.
2. Spend from 15 to 20 minutes on calisthenics. The jumping-jack is the first exercise and then the jumpers progress to leg and abdominal conditioners.
3. High jumpers as well as the other field event men are given a series of starts and short sprints as a part of the general conditioning program; they rest for three minutes, then run one lap of wind sprints, and rest 10 minutes before commencing jumping in the pit.

4. Actual jumping in the pit should be limited to emphasis upon attaining good form in the approach to the bar and in its clearance. It is recommended that a minimum of 10 jumps be scheduled, with the bar placed approximately six inches below what a coach feels the athlete will ultimately achieve. In the case of Dumas, his jumping for form was accomplished at 6'.

5. Jog one lap to complete the workout for the day. During the early part of the season, the Monday

schedule will also suffice for Wednesday.

Tuesday and Thursday:

1. Jog one lap.
2. Spend 20 minutes on calisthenics with emphasis placed upon the leg and abdominal stretches.
3. Take five starts.
4. Run one lap of wind sprints and then rest five minutes.
5. Run two flights of 120 low hurdles. These are excellent for timing, precision, and leg snap. As a precautionary measure against injury, it is a good idea to stretch string between the hurdles for each flight.
6. Walk one lap.

When the track meets start, assuming they are held on Friday, the Thursday workouts should be limited to jogging one lap, calisthenics, and running two flights of 120 low hurdles.

Mid-Season Training Program

Emphasis until mid-season is placed more on conditioning. When we enter mid-season training, the drill on fatiguing calisthenics is reduced. The main concern from now on is having the jumpers acquire the greatest skill in clearing the bar. Two days each week are spent on jumping at full effort — Tuesday, if the meet is on Friday; or Wednesday, if the meet is on Saturday.

Monday:

1. Limber up with a jog of one lap.
2. Spend five minutes on exercises leg swinging, hitch kicking, etc.
3. Join the sprinters for several starts and finish with two 25-yard dashes.
4. Spend approximately 10 minutes on the angle of approach and checking for proper step.

5. Complete the day's workout by striding 150 yards and jogging 100 yards.

Tuesday:

1. Jog an easy 330.
2. Spend five minutes on calisthenics.
3. If the weather permits, expose the body to a sunbath for a few minutes.

4. Condition physically and mentally by jumping for height on Wednesday, if the meet is to be held on Saturday.

5. Conclude the workout by jogging 150 yards.

Wednesday:

1. Have the boys warm up just as they do prior to actual competition.
2. Set a limit of 10 jumps with the last three at the previous best height.
3. Following a 10-minute rest, run

two flights of 120-yard low hurdles with a five-minute rest between. Continued stress should be placed on precision and timing.

Thursday:

1. Jog one lap.
2. Spend 10 minutes on calisthenics.
3. Set the bar at a moderate height and jump five times for form.
4. Run one lap of wind sprints.
5. Complete the workout with a jog of 220 yards.

Friday:

1. Limber up easily and take five minutes of light calisthenics.
2. Psychologically, on Friday it is important to devote thought to the objective (the height) which is to be attained the following day.

Saturday:

1. Use calisthenics at least 20 minutes prior to the competition for a thorough warm-up.
2. Concentrate on clearing each height on the first try.
3. Relax physically and mentally between jumps.
4. Approach the higher raises of the bar with the same poise and confidence that prevailed for the lower raises.

Late Season Training Program

As we progress into the late season, the training schedule is not as intense as it was during the early season and mid-season. Now greater concern is for the attainment of flawless form and perfection, with the thought uppermost in mind of maintaining general tonus and increased desire for even greater achievement.

Monday:

1. Jog an easy 330.
2. Spend 10 minutes on calisthenics.
3. Take approximately five jumps at an easy height. Ordinarily, Monday is the day used to correct any errors noticed on the previous Saturday.
4. Stride an easy 150, and then jog 100 to complete the day's workout.

Tuesday:

1. Jog an easy lap for a good warm-up.
2. Spend five to 10 minutes on vigorous exercises.
3. No jumping is scheduled today. The jumpers work on the steps or the approach to the bar.
4. Take two or three starts with the sprinters.
5. Complete the workout with one lap of wind sprints.

Wednesday:

1. Limber up with a jog of 220 yards.
2. Spend five minutes on calisthenics.
3. Take two jumps at a lower

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height, to be followed by six jumps for height.

4. Finish the practice with a jog of 100, running 100 and walking the remainder of the lap.

Thursday:

1. Warm up by jogging one lap on the grass, then 10 minutes of calisthenics.

2. Spend 10 minutes on the approach.

3. Stay off the track — stride a 330 on the turf and sprint 50 yards, followed by walking fast for 100 yards.

Friday:

No workout is scheduled for this day. It is our feeling that complete rest is more conducive to a good performance the following day.

Saturday:

1. Warm up through jogging and calisthenics.

2. Concentrate on clearing each raise on the first attempt and relax as much as possible between jumps.

3. Following a raise in height and prior to the next attempt, run 15 to 20 yards — be loose. While poised for the effort, be ready for it mentally and greater achievement will be the result.

4. Conclude the day with a light jog.

We would like to express our appreciation to Hilmer Lodge, track coach at Mt. San Antonio College, Pomona, California, for taking the fine sequence of pictures with the new "Robot Royal Sequence Camera," and to H. Lee Hansen for the excellent front cover picture.

tion in soccer will increase player interest and promote its popularity in the United States.

From Here and There

(Continued from page 4)

a .723 percentage . . . Pomona-Claremont College, in 58 years of football, played only 25 tie games . . . New Trier High School in Winnetka, Ill., has four different football squads freshman, sophomore, junior varsity, and varsity. This past fall the four teams won 21 out of 28 games . . . Iowa and Iowa State are the two latest colleges to take up soccer. It is conducted as a soccer club activity and is not considered an official activity of the respective athletic departments. This has been the usual procedure in the spread of the sport. Purdue and Indiana have soccer clubs as do a number of the smaller colleges of Ohio . . . Bill Strannigan, Iowa State basketball coach, and Chuck Benton, North Dakota State basketball coach, were members of Ev Shelton's 1941 conference championship team at Wyoming. Strannigan was all-conference and led the team in scoring that year.

Soccer

(Continued from page 55)

session of the ball within the area for as long as possible. Play is continuous and goes right on when an opponent gets the ball for his team. Players should pair off and play man-for-man. If the ball goes outside the penalty area, it is kicked in by the player opposite the man who touched it last. This game of soccer keep-away affords excellent practice for dribbling, short passing, and trapping, as well as tackling. It is also a fine conditioner and provides an opportunity for keen competitive play.

The skills described in this article are fundamental for better soccer. Their mastery will provide the basis for the more specialized and refined techniques which are the tools in trade of the soccer stars. Better instruc-

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Toward Unity

ATTENTION has been focused on the poor physical condition of today's youth. President Eisenhower brought to light a number of facts which have been known for some time to those in the field of athletics and physical education. With the public gaze focused on the problem, there comes an awareness that something must be done. Seldom before has the need for athletics and physical education been so clearly advanced.

Now is the time for the leaders in the field of physical education and athletics to join hands and discontinue the family quarrel.

For those in physical education—it is necessary to realize that there is tremendous public interest in the interschool athletic program and in numerous instances the excellent facilities in existence today are due to this interest. Physical educators must accept the fact that the interschool program serves those gifted athletically in the same manner that the band, chorus or orchestra serves those gifted musically. Physical educators must recognize the problems connected with interschool athletics and help in their solution. They must defend the interscholastic and intercollegiate programs instead of siding with the critics of varsity athletics.

For those responsible for the administration and coaching of interschool athletic teams—there must be a realization that a strong physical education program is the foundation for a successful athletic program. Athletic administrators must realize that the whole concept of physical education has changed. The old term "fits and jerks" no longer applies to the modern physical education program which places emphasis upon the teaching of athletic skills. Athletic administrators must realize that physical education programs are designed for the average student. Many coaches who are accustomed to working with the athletically gifted are inclined to consider the physical education program as juvenile.

The athletic coach can help the cause of unity by using his many public appearances to acquaint the public with the work of the physical education department.

A small but vociferous group of physical educators has been vehement in its attacks upon school and college athletics. Prompt answers to these attacks by other leaders in the field of physical education will aid materially in bringing the coaches and physical educators into closer harmony.

Let the coaches and physical educators stop blaming each other for the poor physical condition of our youth. Instead of bickering as to the cause, let them realize that a serious problem does exist. Once having come to this realization, let both groups resolve to help each other in finding a solution. A program of this magnitude requires unity of action.

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JANUARY, 1956

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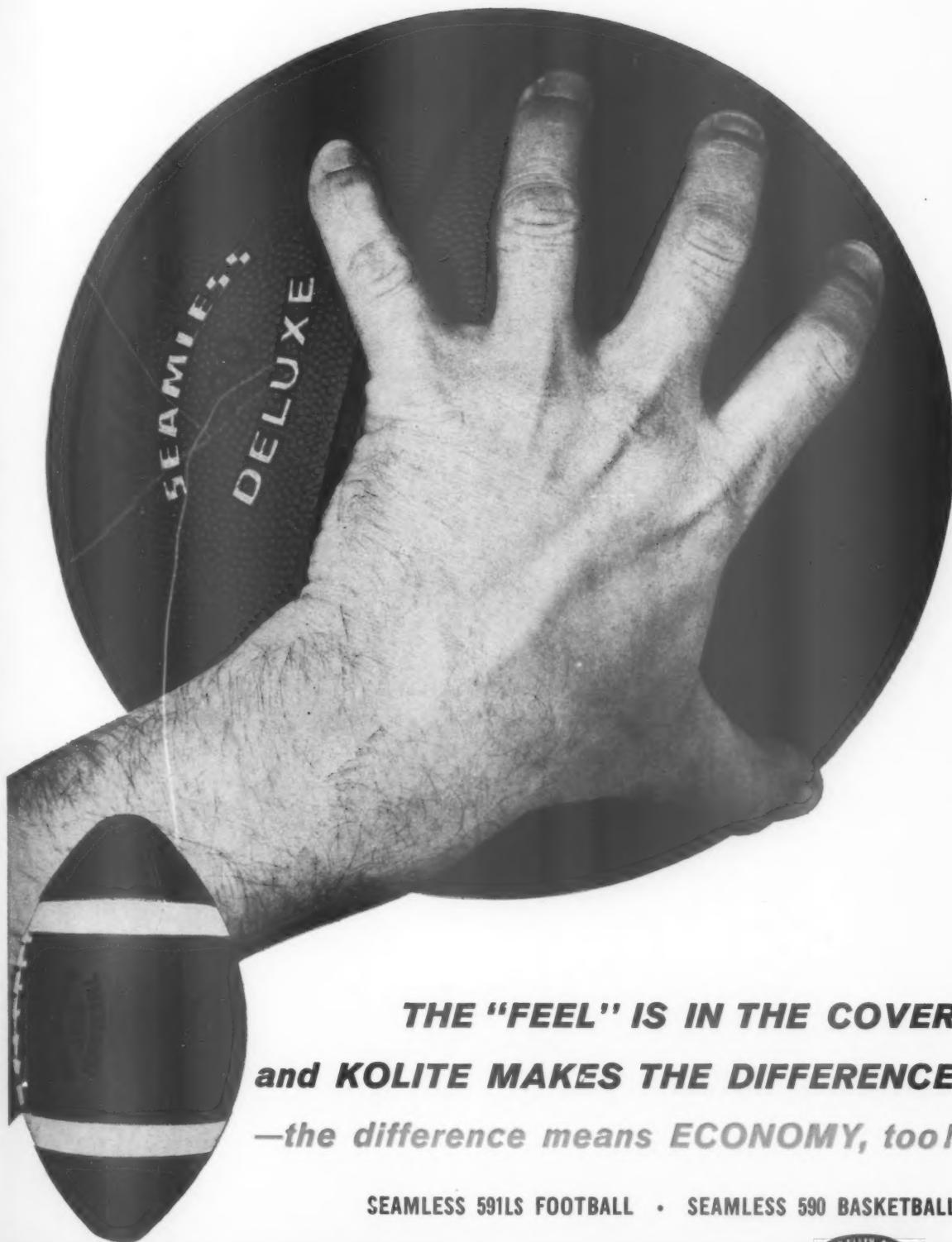
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